

## **The Impact of Part-Time and Full-Time Work on Employees' Efficiency the Importance of Flexible Work Arrangements**

Luigi Pio Leonardo Cavaliere<sup>1</sup>, Zakariya Chabani<sup>2</sup>, Dr Arup Roy Chowdhury<sup>3</sup>,  
Dr. Satuluri Padma<sup>4</sup>, Kartikey Koti<sup>5</sup>, M. Kalyan Chakravarthi<sup>6</sup>, Dr.S. Suman Rajest<sup>7</sup>,  
R. Regin<sup>8</sup>

### **Abstract**

Flexible work arrangements are now becoming truly normal, aiming to enhance workers' quality of life. Currently, various businesses and organizations are adopting this contracting model to accomplish multiple objectives; aiding workers in managing their jobs a balance of their lives, on the one side, and efficiently and effectively fulfilling their organizational needs and requirements. The biggest push for businesses may be to satisfy the satisfaction of their employees so that they can perform well for the good of all stakeholders. However, swift developments have played an essential role in creating and executing bendable work arrangements in the corporate world. For instance, service industries need funding for long-term educational, banking and telecommunication missions and for press and other sectors responsible for finding innovative job practices that concentrate on consumer loyalty with additional stretching working conditions. The researcher seeks to investigate the effects on employee achievement of flexible working arrangements. It is also evident that flexible working arrangements can be very helpful to enhance and maintain the efficiency of workers. Many flexible arrangement considerations, including job aptitude for versatility and dependability and the approach to flexible working time, have a significant effect on the accomplishment of workers.

**Keywords:** *Part-time, full time, productivity, performance, emerging technology, international economic problems.*

### **Introduction**

---

<sup>1</sup> Pppppp. Department of Economics, University of Foggia, Foggia, Italy, luigi.cavaliere@gmail.com

<sup>2</sup> Canadian University Dubai, Dubai, UAE, zakariya.chabani@tud.ac.ae

<sup>3</sup> Assistant Professor, HR, XIMB, School of HRM, XIM University, Bhubaneswar.

<sup>4</sup> Associate Professor, Ahmedabad Institute of Hospitality Management, Ahmedabad, India. padmasmba@gmail.com

<sup>5</sup> Professor, Dept. of Commerce and Management, PES University, Bangalore, India.

<sup>6</sup> School of Electronics Engineering, VIT-AP University, Amaravathi, India, kalyanchakravarthi.m@vitap.ac.in

<sup>7</sup> Researcher, Vels Institute of Science, Technology & Advanced Studies, Chennai, Tamil Nadu, India.

<sup>8</sup> Assistant Professor, Department of Computer Science and Engineering, Adhiyamaan College of Engineering, Tamil Nadu, India.

The business climate is modified rapidly to ensure workflow and global business survival, which demands adjustment to the contracts [1-6]. This needs a good effort that can be rendered in several respects. These involve emerging technology, the corporate climate, and international economic problems, and so on. The former reforms were recognized as a "flexibility principle", and employee-oriented approaches have taken an important part of corporate life since the 1970s [7-11]. Organizations also established pioneering employment agreements to evolve to preserve their key economic advantages and get workers to greater levels of efficiency. Companies now face the task of pursuing the optimal pattern of ensuring that workers feel happy in their role [12-16]. Organizations strive to maintain their professional workforce and to keep pace with changing working environments. Competitive benefits for organizations based on supplying their employees with a happiness status. This inspires productivity and allows companies to build a reality of distinction and recruit qualified workers simultaneously.

In comparison, the production of work and unemployment control is another important factor today. Moreover, the creation of innovative labour arrangements and types of jobs is seen as a crucial priority for the promotion and eradication of employment; good effects for personal lives are progressively being seen, for example, flexible working agreements will likely reduce traffic challenges for employees who historically experienced heavy traffic in their everyday routes, particularly in the major cities. Work production has proven satisfactory as workers have more adaptable timetables to master their chance beyond the workstation and have fewer singular doubts [17-24]. The elimination of late staff, non-exhausted employees, and personnel focused on their employment and dedication significantly improves the flexibility with which a company can be handled. The influence of the presentation of the adaptable job model for employee execution in this particular scenario has been stressed in this examination [25-29].

### **Research Problem**

The key justification for the research is to analyze the workers' perspective inflexible contracts [30-37]. The researcher explores his ideas and the different working conditions in which he works easily and well and explores the impact on his results. The research issue then addresses workers' efficiency and productivity by introducing flexible work arrangements [38-45]. The researcher has created and designed his study into the following topics.

- Can flexible job arrangements impact the work of the workers and how?
- How does the workforce identify flexible job conditions play an important role?

### **Objectives**

The present analysis aims to assess the impact on employee efficiency of flexible contracts [46-52]. In addition, the analysis in contravention of flexible working time suitability to function with convenience has been investigated for the ties between flexible working arrangements and the satisfaction of employees as a negative effect of the commitment of employees to work and work.

### **Flexible Work Agreements: A Definition**

"Flexible work game plan" as any continuum that adapts the time limit or potentially finishes the task continuously:

1. Supplementary work hours are an extra job day (strategic and compacted work hours) and provide Game Schedules for Shift and Break Plans.
2. Additional working time steps such as low maintenance and occupational shares.
3. Provision as home remote operating in the working world.

This report reveals how flexible working arrangements are already provided in working environments. What acts are taken and how characterized can vary greatly. We also tried to understand the nature of such acts by assembling them in the direction of our concept above in flexibility in job preparation and working time and the softness set up for exploring strategic methods for advancing FWAs.

### **Flexibility in Work Scheduling**

Substitute Working Timetables: Any timetable other than that which is standard to the work setting:  
Flexible Day: Time Schedules focused on the specifications of the workers, who a boss approves; for instance, an employee who has 40 hours a week to attend can change arrival and departure times or establish new working hours. Representatives may even attend additional time on one day for one more day or one week after a Friday morning conference, for customer support in another time zone, on Friday morning operating around night time. These strategic plan schedules can be modified to consider conditions omitted from the expert for any or half of the workweek. Compressed Workweeks: Representatives operate all the day in the typical five-day week, extending day by day employed 10 hours by day worked 4 days, seven days more than eight hours by 5 days by 7 days. During every two weeks, a practitioner operates 9 hours every week Monday through Thursday and Friday off. These courses of action may be modified to include the conditions, but the professional does not operate on-site during any or half of the workload during the week [53-62].

### **Conceptual Model**

In the light of frames used as the normal quality of the work process, Slope et al. (2008) developed a theoretical framework of the work environment versatile [63-74]. Their emphasis was to broaden the knowledge of versatility, assess it and connect it with various concepts. They took a holistic point of view and established it in the wider sense of hierarchic transition in Society.

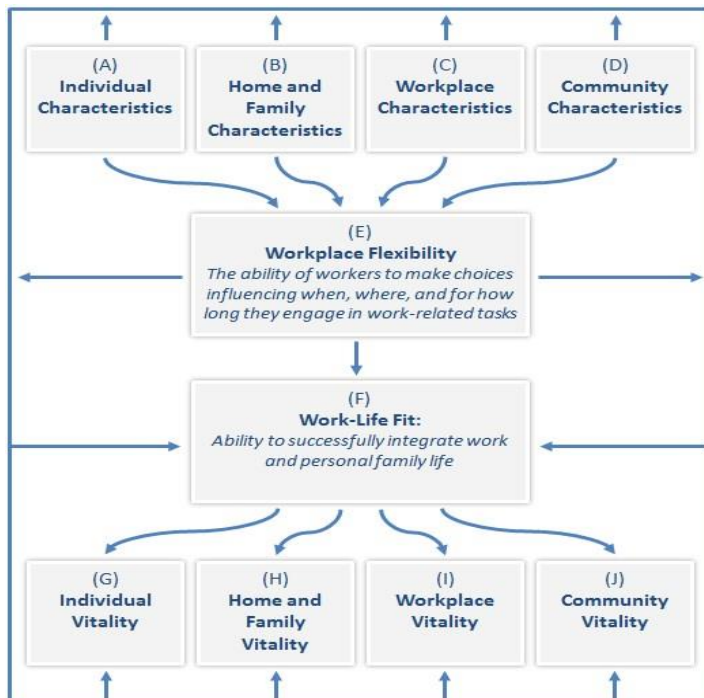


Figure 1. Conceptualizing flexibility based on Systems Thinking (Hill et al., 2010)

This model offers adaptability in a complex field with different precursors and effects, which describe the various procedures in which people's families and organizations develop and contribute. Figure 1 displays the model [75-86]. The best four variables all affect the adaptability of the workplace, which is defined by the ability to decide when to operate, where and how long to work. Work-life health at this stage refers to the ability to harmonize professional life and family life as the four outcome variables are considered contingent and vital to emphasize the positive relationship between work and various circles [87-93]. The statistical qualities of Hill's model speak, for example, of sexual identity, age and income. At the same time, remains of family features such as marital status, childhood and childhood proximity alludes to general qualities of the work community, e.g. the authoritative atmosphere and service, and applies to the extension of the organization from, for example, access to tyke care, travel, and web-based communications to support for communities and social norms as regards work. As regards the results addresses numerous aspects such as well-being, the fulfilment of life and human accomplishment. To provide some examples, it alludes to home life in these fields of conjugal accomplishment, parenting, and childhood behaviour and housework [94-101]. It applies to professional life and performance, such as the implementation, turnover, fulfilment, and liability. It persists, for instance, in community partnerships, for collaboration and contribution in the group [102-108]. The relations between the variables are perplexing, as all four precursor factors explicitly affect adaptability and the different models. At that point, adaptability affects all the resultants, particularly when it is suggested that they should explicitly affect all result variables [109-122].

The method is misunderstood since associations using creative work methods may provide higher quality officials and associations with better quality control organizations who can be more likely to start up new workplaces and invest in groundbreaking marketing, fund and R&D strategies. Additionally, the multifaceted consistency of ties and partnerships between structures is better achieved by enhancing delivery after using innovative work methods; for example, adaptable work courses may not necessarily have to be achieved merely because of the rehearsals [123-131]. Because of these reasons, the true impact of these plans cannot be personally measured since the influence is larger depending on and potentially greater than the actual impacts of these plans [132-139].

### **The Role of Organizational Culture**

Culture demands an extraordinary role in all human behaviour. It explains the general public in which we live and the way we experience and see life. Cultural is proposed as a kind of attitude programming that takes place by thoroughly learning and integrating programs and activities in the community [140-157]. Legitimate culture on the different levels can be portrayed as the common opinion that conclusive study shines inside legitimate units and can move from other radical units. The affiliate's living style in such a manner indicates certain aspects that have evolved, how an association exercises its strengths and blends with the usual schooling and well-being of an affiliate [158-165]. The Union aims to view work processes rather than see if they arise, which a wise radical society is basically. Another lifestyle improvement strategy underlines values; the right affiliations reflect the qualities of professionals specifically indicated [166-175]. The reasoning of lifestyles is the same at a rather simple level as different level air. It is generally more in terms of valid procedures and structures from the expert viewpoint. Honestly, the two concepts revolve around the internal social state as an intense and general representation. The environment means a real condition at any time stage, and Society suggests more to the inscription of working citizens [176-181].

### **A Supportive Organizational Culture**

An association's existence offers an essential glimpse into how a delegate views his or her ability and work environment, which is among the essential considerations for selecting the possibility that all conditions for reaffirming and utilizing several methods are fulfilled [182-189]. The mutual concerns on how the affiliation help and characteristics of the compromise in work and the family life of delegates are viewed as a strong, conclusive culture [190-195]. The clear nature of the way of life of affiliation and the quality of managers and accomplices render the affiliation simpler to create than the actual structured versatility systems created, which both accounts regarded as more essential and improved by delegates. The activities and experiences kept and offset in membership give the workers what is important for the membership and the organization. If specialists see that the usage of usability advantages is not part of this norm, they might be confused and will not use them to make little use of their usable personality [196-200].

This is compatible with the philosophy of human science, which is focused on the fact that the choices taken by people are tailored to the circumstance that a man becomes conscious of the fact that the value lies in adjusting a situation in compliance with either his home circumstances or his workplace so that a man may more profitably function in it [201-204]. A clean, easy-going environment offers a foundation for easy flexibility, which distinguishes structured methods from several viewpoints. It depends on a trustworthy partnership with its boss. Less importance is imposed on management of working hours. It thus influences a correspondence atmosphere where officers and managers care about any one of the different demands and give it more time to match particular activities [205-2011]. Simple versatility applies with a wider variety of agents, like a common provider, who may also mix jobs with multiple commitments without wage cuts or appeals. Formal game plans tended to match various categories of workers, particularly women with childcare responsibilities [212-218]. A sustainable community not only stimulates more formal versatility and influences apparent improvements to working life but often expects a central position in the expectations and responsibilities of membership of the agent's general perspectives. Thompson and Prottas decided the

undistorted lifestyle consistency to have a distinct connection between job happiness and weight, stop ambitions and work to family struggle [219-224].

Furthermore, they find that the openness of formal versatility and performance, such as non-participation, family work and competence, are not related. Similarly, McNall Masuda and Nicklin stress the vitality of directors in their behaviour towards excitement. Agents are most definitely encouragement, e.g. greater happiness with jobs and reduced attrition. They find like they respect and care that they have a life outside the office in a versatile manner. This prescribes unrelenting family rightful recognitions which effectively mediate the association among family openness and outcomes, e.g. job perspectives or family problems. Feldman (1990) says: "The part-time work- and experience relationship has not necessarily been coordinated through task setting and calculation, but these elements often affect the preference or explanations whether agents have bad maintenance and attitudes or habits. Figure 2 demonstrates his suggested structure. He also proposed the intervention of task determination or estimation variables.

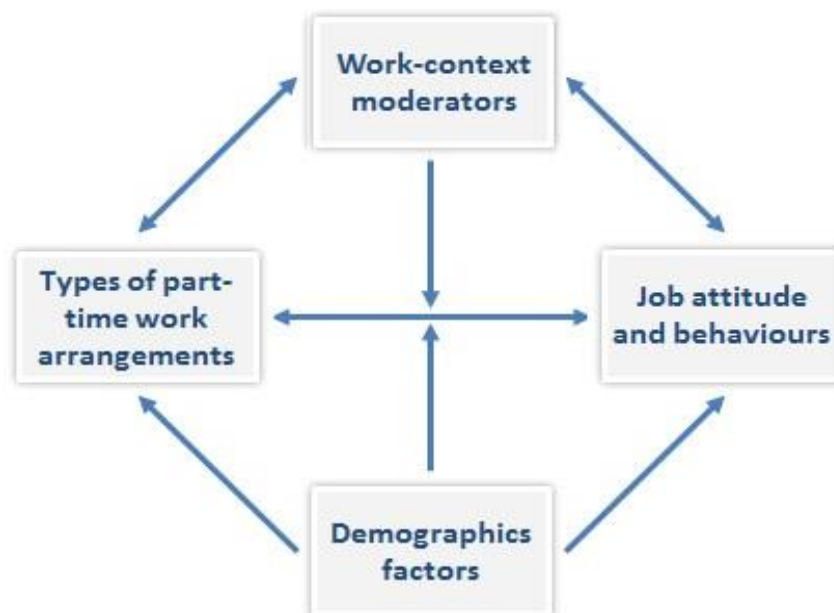


Figure 2. Part-time and job attitudes Relationship (Feldman, 1990)

The effect of part-time dealings with working practices may then be circumscribed, for example, by part-time employment, which decreases wages and may impair the work's fulfilment or exercise. In either event, it should be remembered that the impression of the way of life of an association or the causes of its function remains a single estimation of the state of the conclusion by the members and the interpersonal responses that arise in connection with the planet.

### Establishing a Supportive Culture Challenges

Since structured methodologies are routinely used to conform to open methods, they are carried out at the market level without regard for the staff, who again imply the usage difference analyzed about the open environment. The vital community is evolving from time to time when societal transition cannot be identified, and so adjustments do not come until radical changes or modern technologies. The usage of structured approaches does not alter the wider views and perceptions of how work is conducted, an impeccable method for work and how people who do not keep to these work standards are seen. In addition to not utilizing flexible designs as a common emphasis, sharpening work

environments will promote a movement as the directors look to control versatile masters and conventional staff astonishingly. As the philosophy of networks sets forth, efforts to be effective when on transit can be incorporated in and linked to the collective plan of association, including essential and social help.

Assistant aid requires the job schedule and the association's HR programs, while government support is simple in the workplace with social and social assistance. Social assistance operates at the workgroup stage when accomplices and organizations reinforce the workman, and a little later at a phased level, which means lifestyles, attributes and measures of participation, until it is over. Without social and necessary support from work-life exercises, the danger is that work-life exercises, for example, require several work plans, builds hierarchical frameworks, more on paper than a Certified Membership. Accommodation indicates that an affiliate is hesitant to accept a move and only makes it under extraordinary and defined circumstances in the light of a replacement plan for its work. The elaboration then indicates that a few changes will be made, and several schedules will be established by, for example, structured methodologies, but without abandoning stray bits of membership and the settlement of duties. Change insinuates as an affiliate looks for attention to adjust its plan for fitting in a jar. It often has the chance to upgrade and study older tactics that function as appropriate. Many scholars aim at three perfect models of incremental learning. In this boundary connection with the shifting viewpoint, some are formed to analyze and examine and hence can be adapted to shifts in the external situation more effectively. On the opposite, some are comforted who lean for nothing different. While they agree to empower agents to function low help in unique situations, they cannot do anything about their association and restrict any learning company.

In this sense, Lee et al. (2000) provide an interesting view by the partners of numerous progressive responses to changes in versatile job approaches, demonstrating that responsivity to versatility may represent different levelled reactivity methods for changes in having different solid cultivation is a test that governs or guarantees a job atmosphere that is far from all affiliations. Precisely where requests from jobs refute the usage of alternatives to work and legal assistance for the integration of work and family life, this is considered a clashing culture. In a conflicting culture people who are ever accessible and qualified in expanded times are seen as the perfect worker, who takes no account of the reality that association includes all the methodologies of work-life and strengthens This exchanges mixed signals to agents which could render them less likely to utilize these schemes. Restricting community is one of four societies that can be seen writing in terms of aid forecasts, such as corporate associates, social services, and restrictions for companies, and requests delegates for a definite time.

A minute community is a society that welcomes employees and is friendly and not constrained, but they face tremendous challenges and little support in the third-class, contradictory Society. Therefore, the output community is an independent culture in which agents obtain no support but still numerous bricks. The way delegates perceive their talents is extraordinary depends on the work culture in which they work isolated from only two kinds of social orders, social orders deter and social order empowerment. In blocking social order efforts, appearance and part-time jobs are seen as a decline. Entrepreneurial reasoning and encouragement are used in fostering social orders, and compliance is measured and not claimed. When organizations may enhance the family-friendliness and sustainability of their inclusive Society, the job atmosphere improves as well, such that their agents enjoy an unrivalled working-life improvement. Via creating a family-friendly culture through flexibility politics, affiliates should anticipate a complex role to decrease family work and improve attitudes in specialist areas. Furthermore, a robust legitimate culture will become an association provided it is less imitative and observable than packages of human capital. Members have thankfully

considered flexibility and made significant steps to improve intensity or incorporate it as part of a business method.

### The Management Role

The assistance of superiors is an important aspect of the association. Any informal or structured transition agreements between and across administrative departments ensure adaptability since they are responsible for distributing and modifying them. Particularly in non-supportive hierarchical cultures, steady administrators can increase the members' sense of qualification and happiness and the feasibility of adaptable work game plans and may also negate authoritative assistance from superiors who are non-supportive in a strong and strong authoritarian culture. Therefore, a good supervisor acknowledges that the association requires an attempt to shift the responsibilities between jobs and communities. Administrative assistance was connected to a more notable usage of adaptable jobs and tended to greatly impact representative job circumstances such as work completion. Additionally, hierarchical culture and supervisor assistance tended to overtake conventional methods because of the most common duty of district governments to use adaptability approaches.

### Supervisor Behaviors

A family-friendly management strategy explores how manager behaviour affects employees. Sledge, Kossek, Zimmerman and Daniels identify four styles of activities that include enthusiastic assistance to better practices and recognize the main value of work-family issues. They claim that administrators are different based on their job and place within the association and are more dynamic in supporting such aspects as endorsement improvements in operating hours and top management. They are also strong examples of the way that leaders are closer to home and influencing hierarchical Society. They also suggest they are good examples. To extend this framework, Mr Hamer advocated family boss activities to arrange the four develops dynamically since they are exposed to the general concept of family-solid principal activity (Figure 3). Energy aid relies on the idea of the staff, relating to them and turning them to make them more sustained in light of the representatives who set themselves the right way to coordinate work and families, for example, by operating themselves flexibly, part of the demonstrative behaviour. Instrumentary assistance concentrates on sensitive assistance, listening to workers' needs and fulfilling their expectations while they are near.

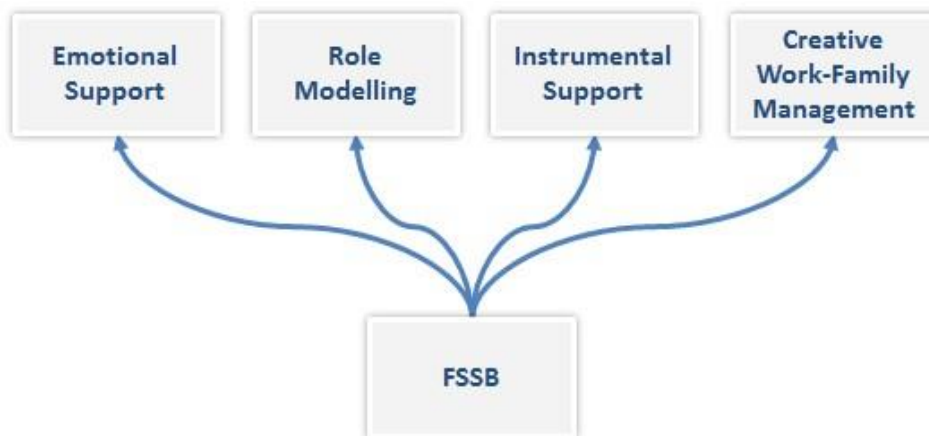


Figure 3. Construct of Family Supportive Supervisor Behaviors (Hammer et al., 2009)

However, creative job family management relies on a more constructive and innovative strategy in handling adaptability administration to identify better-operating practices and facilitate workers'



viability. By testing the machine, Hammer et al. prove that the practice of a recognizable supervisor is unique to general boss assistance and clarify what is known as family-building activities. They interestingly announce the value of manager assistance as free of working culture or official methods and therefore establish it as a modern development that helps one to understand how managers track how policies are being practically applied and this can then be tracked as a separate development. Kosek claimed that the related usage of adaptable work game plans impacts multiple managers and encourages adaptable family and level working courses or other well-known statistical variables. In this respect, they propose that if supervisors take adaptable job routines themselves, they advance towards becoming a shift operator and good examples and support evacuate the social barriers to adaptability, which can be expected by the good examples provided by Hamer and others. Kosek also found that the more expert leaders work with their members, the more likely they are to be self-adaptive. The more exploratory leaders are willing to adjust to their topics, the more support they are, hopefully despite shooting themselves. A societal transition will eventually take place. Alen developed that a family association was impressed by a persistent association between strong directors and labour family disputes. Alen also found that a steady field had only partially clashed with the link between powerful leaders and professions. This can be due to the importance of directors when selecting options for adaptability open to members and their immediate and significant influence on the perspective and viewpoint of the representatives on the workplace and the organization. A survey from the human experience theory indicates that the chief assistance is defined by how individuals are experiencing adaptive job plans being applied to adjust work and personal life to the environment.

### **Research Methodology**

To underline goal estimations and the verifiable numerical or logical analysis of data obtained, the researchers have developed a quantifiable method by reviewing surveys and outlines or monitoring the start of current quantifiable data using the template SPSS program. Quantified analysis explicitly complements numerical data collection and blends them with completed social activities to represent a precise reflection. Many wonders step on to the quantitative research protocol as they are now numerically accessible. In either scenario, computational methods should be used to analyze even wonders that are not indubitably numerical. The research model is focused on the open published review of the ideas available for the vital organization, different stages of learning and higher education. The hypotheses of the analysis would be operationalized by steps of prior prosecutions and would presumably be attempted utilizing verifiable techniques.

### **Data Collection Method**

The knowledge for exploration was gathered from two or three available places, including books, papers, previous reviews and resources. In testing their theories, it is clearly shown that the research concentrates on descriptive and inferential review to depict and classify the possibility of connections between the autonomous and the dependent components. The actual examination software uses testing tests to create this partnership (SPSS).

### **Collecting Secondary Data**

Secondary data is a category of data that has been used lately in books, magazines, articles, blogs, online aims, etc. In these sources, many statistics are available on the company investigations, and the probabilities of the examination area are little respected. Therefore, the use of fitting parameters to select related data as an evaluation institution expects a fundamental aspect such as increasing the

integrity of the analysis and its sustained consistency. The criteria are in any case not immune to the specifications of the system, the capability of the supplier, the stability of the source, the consistency of the exchanges, the hugely high quality of tests, the substance's degree of responsibility to step ahead on the review site etc.

### Collecting Primary Data

In different methods, quantitative data analysis approaches utilize sensitive statistics. The compilation and study of quantitative data merge diagrams with near demand, membership and differences with faith methods, mean, fashion, emphasis, etc. Regardless of what might be common, quality research techniques exist beyond statistics or consistent estimates. It is connected with not quantifiable words, emotions, sounds, notions, tints and particular pieces. This conglomeration approaches include interviews, open demand studies, enthusiasm or creativity, social centre affairs, appreciation, smart tests, etc. The preference between quantitative and subjective data collection methods is dependent on research centres and goals in the field of the examination.

### Findings and Results

The researcher used the (SPSS) to dissect important data and evaluate the findings. The first step is to set the data up to allow it fair to analyze the data obtained in a sorted arrangement. This advancement allowed the scientist to conduct various procedures, including modification, encoding and records.

### Reliability

The scientist has measured his test reliability by integrating two views with a particular end target to verify the unspeakable standard of the exam. A comparable examination may then be done in two separate situations with a similar individual. If the evaluation is strong, the emphasis on the primary situation demonstrates a high relation with the focuses in the second case. One might argue that the test has unwavering accuracy in these circumstances. The test is entirely accurate if it results in identical tests for each example of the item to be calculated, as shown in table 1.

Table 1.

*General reliability statistics*

| <b>Cronbach's Alpha (<math>\alpha</math>)</b> | <b>Number of Variables</b> |
|-----------------------------------------------|----------------------------|
| 0.903                                         | 44                         |

For assessing general reliability, the researcher assessed the scale reliability with the "Cronbach alpha" test. The alpha value of Cronbach is 0,903 "Cronbach's alpha" in Table 4.1 and should be at least 0,7800 or higher in the social science surveys. The General magnitude confidence is a concept that can be articulated as a participant in the overview that can effectively understand and respond to the inquiries in a typical location similarly. The 0,903 calculation indicates that the analysis is extremely solid, and we can progress to the next step, the factor test. This procedure can be objectively analyzed by analyzing the benefits and implementation scales of adaptable working

strategies. In both the overall and the sub-factor inquiries, at any stage, no unmistakable consistency concerns existed. The trustworthiness of all variables as seen in the table 2 below:

Table 2.

*Reliability analyses of the variables*

| Flexible Working Factor |                     | Performance Factor   |                     |
|-------------------------|---------------------|----------------------|---------------------|
| Cronbach's Alpha (α)    | Number of variables | Cronbach's Alpha (α) | Number of variables |
| 0.886                   | 32                  | 0.921                | 12                  |

**The Factor Suitability Analysis**

The researcher introduced factor analysis to minimize factors by classifying basic variables or components according to the predetermined measurements. Each classified factor involves sets of variables and evaluates the relationship between the parameters in the same way. Though each fundamental variable acquired through factor analysis involves various measurements, distinctive steps have been taken. The collection of variables instituting an entity then measures a related calculation. This test aims to assign the components in which they are placed variables used as part of the correct scale. In addition to the worker output, which is segregated from replacement components, the final purpose of the analysis was to analyze point-by-point using SPSS software and two critical variables the contribution of the members to adaptive work time. The adaptable working time partitions are quite remarkable. Seven associate components consider a work execution as a single basic factor. Not unexpectedly, issues about employees' execution in one factor are seen as related by an interest representative: 12 summary requests focus on similarly fundamental reliability. All variables found in the last adaptable calculation are isolated into seven linked elements. Completion of job Reasonability for adaptability of jobs state of mind for flexible job hours. These seven elements from the 30-21 illustrate that they affect the members' conclusions on their function. Surprisingly component was #6th factor in these investigations: "My job focuses on me!" In the light of these two investigations, which have been tested by turning under ordinary circumstances, a replacement element has been framed without investigating anyone else. In addition, the tendency towards understanding the additional momentum of every investment company to contribute to the base reflects the seven elements. Stacking the two variables on a solitary factor reveals that experiments are functional figures that have been tied together in the past. Accordingly, an adaptability measure with seven specific measurements must be carried out and the repetitive inquiries during the next level.

Table 3 following the diffusion of element bunches:

Table 3.

*Distribution of factor groups*

| <b>Flexibility Factor Groups</b> | <b>Number of Questions</b> |
|----------------------------------|----------------------------|
| Job Satisfaction                 | 3                          |
| Job's Suitability to Flexibility | 9                          |
| Attitude Towards Flexible Hours  | 6                          |
| Satisfaction                     | 7                          |
| Organizational Loyalty           | 3                          |
| Job's Negative Effect            | 2                          |
| Loyalty to the job               | 2                          |
| Performance Factor Groups        |                            |
| Employee Performance             | 12                         |
| <b>Total Number of Questions</b> | <b>44</b>                  |

### Correlation

The association parameter clarifies the headings of the variables and how projections are related from (-1) to (+1). This element is the zero approximation for a +1 relation if the collaboration is strong or -1 if the transition and the whole association are present. In comparison, correlation parameters are often indicated using the letter "r." Its imbalance can also show the correlation parameter. An illustration #(n) experience is very broad when evaluating the transitional qualities parameter. In evaluations with a wide number of perceptions, while a correlation parameter less than 0.25 may be called remarkable.

The parameters of the correlation are shown in Table 4 below.

Table 4.

*Correlation Parameter*

| <b>High Negative Relation (-)</b> | <b>Medium Negative Relation (-)</b> | <b>Weak Negative Relation (-)</b> | <b>Weak Positive Relation (+)</b> | <b>Medium Positive Relation (+)</b> | <b>High Positive Relation (+)</b> |
|-----------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| $-1 \leq r < -0.8$                | $-0.8 \leq r < -0.5$                | $-0.5 \leq r < 0$                 | $0 < r \leq 0.5$                  | $0.5 < r \leq 0.8$                  | $0.8 < r \leq 1$                  |

The correlation calculations indicate that the hierarchical unwavering, an adjustable element, has an instant, valuable outcome with an estimated 0.410\*\* of the representation + efficiency. In the end, the members believe that the association functions with such an outstanding job and are proud to function there and show these ideas as a clear and powerful effect on their implementation. Occupational efficiency has been firmly applied to the worker output by another subfactor of adaptable functioning with an average association of 0.326\*\*. In addition to staff, the association would be opposed to such operation, and the ties between such components and their application have been developed for their protection and efficiency. Work completion is measured at 0.294\*\*, which indicates whether members change into another organization. Representatives in this replacement aspect are more dedicated than they are to contribute to the organization's success. At the same time, they enjoy performing the same task, they are both satisfied with their employers, and more frequently than not carry out their work happily. This influence results positively. They are positively influencing the implementation, an estimated 0.256\*\*, towards flexible operating hours. In this respect, as the

representatives indicate, adaptable working hours can relax and convince representatives to adjust working hours. In the meantime, adjusting operating hours, which are appropriate for work, strongly impacts the working committee. The adaptable working approach has good effects in adopting members of game plans for childcare and family unit assignments.

Table 5.  
Correlation Analysis

|                                         |                     | Job Satisfaction | Job's suitability to flexibility | Attitude towards Flexible Hours | Satisfaction | Org. Loyalty | Job's Negative Effect | Job Loyalty | Employee Performance |
|-----------------------------------------|---------------------|------------------|----------------------------------|---------------------------------|--------------|--------------|-----------------------|-------------|----------------------|
| <b>Job Satisfaction</b>                 | Pearson Correlation | 1                | .502**                           | .373**                          | .493**       | .763**       | -.265**               | .590**      | .294**               |
| <b>Job's suitability to flexibility</b> | Pearson Correlation | .502**           | 1                                | .442**                          | .376**       | .425**       | -0.067                | .326**      | .207**               |
| <b>Attitude towards Flexible Hours</b>  | Pearson Correlation | .373**           | .442**                           | 1                               | .227**       | .421**       | 0.012                 | .351**      | .256**               |
| <b>Satisfaction</b>                     | Pearson Correlation | .493**           | .376**                           | .227**                          | 1            | .396**       | -0.105                | .553**      | .200**               |
| <b>Org. Loyalty</b>                     | Pearson Correlation | .763**           | .425**                           | .421**                          | .396**       | 1            | -.180*                | .713**      | .410**               |
| <b>Job's Negative Effect</b>            | Pearson Correlation | -.265**          | -0.067                           | 0.012                           | -0.105       | -.180*       | 1                     | -0.093      | -0.021               |
| <b>Job Loyalty</b>                      | Pearson Correlation | .590**           | .326**                           | .351**                          | .553**       | .713**       | -0.093                | 1           | .326**               |
| <b>Employee Performance</b>             | Pearson Correlation | .294**           | .207**                           | .256**                          | .200**       | .410**       | -0.021                | .326**      | 1                    |

Proper work for adaptability (.207\*) is highly affected by success (.200\*\*) because it may not have a large performance rate. From Table 5, it can be shown that there is a high association (.713\*\*) between the authoritative dependency and the work devoted to the two components. As the knowledge shows, members have been told by their associates that their position is an ideal place for employment, that they are delighted to be a part of and that they will reach optimum work potential. In terms of role reliability, members would make considerable attempts to contribute to the prosperity of their company and will recognize all responsibilities to remain in the association. Again, the detrimental effect of the factor profession influences the output of employees (- 0.021). Workplaces that concern members affect execution. An immense and optimistic association is observed (0.713\*\*) between hierarchical trust and occupational success. Many strongly bureaucratic leaders provide favourable evaluations of their behaviour. The link between job success and hierarchical instability is enhanced when members are satisfied with their jobs and carry out their tasks more frequently than not, even though they are going to a related activity. These two factors again influenced the execution of the worker Representatives of companies that had adapted operating hours had strong views on the hierarchical loyalty and efficiency of the task. The association between job resistance and success has an average of 0.553\*\* in the correlation analysis. The development of the worker level affects their commitment to the community and the application of jobs after it is said and done. The speculation generated before the exploration is quite legitimate from the correlation table. A relapse exam is used to assess the association between two or more factors. To explain the dependent variable, Relapse uses conditions to define numerical relationships between a necessary variable and free variables. Relapse analysis is useful because two factors are defined, and one shifts orderly when the other shift is detected in one of them. The study contributed to the dedication of empirical articulations to create a relation between two variables, defined as a relapsed state. We tried to quantify the ordered recurrence show using the exam test values.

Thus, approximations are the attributes integrated into our model. A reoccurrence display with analysis of one variable is classified as a clear reoccurrence and is considered separate due to at least 2 variables. After the similarity evaluation, separate repetition inquiries were performed on the usage of the SPSS program Results suggest that hierarchical stability shadows the complex self-reliant variables most with a beta rating of 0.393 in specific (essentialness level beneath 1 percent). Authoritative commitment has an immediate effect, and a hierarchical efficiency is controlled by 18.4% of improvements in job performance. In addition to the relapse analysis, it has been found that hierarchical dependability is more important than the impacts of the different variables (job fulfilment, occupational reasonability for adaptability to the negative effect of adaptable work hours and faithful employment). We assume that association management may gain improved skills and efficiency by fashioning the authoritative framework in light of these results. Table 6 clarifies the model's singularity:

Table 6.

*Abstract of Model a =Independent Variables: Job Loyalty, Job's Negative Effect, Job's Suitability to Flexibility, Attitude Towards Flexible Hours, Satisfaction, Job Satisfaction, Organizational Loyalty Factor*

| Model | R     | R Square | Corrected Square | R | Approximate |
|-------|-------|----------|------------------|---|-------------|
| 1     | .429a | 0.184    | 0.152            |   | 0.71951     |

In the conclusion section, subtle elements of Table 7 are analyzed to show that when the members accept and recognize authoritative priorities and vision by their colleagues and giving their full potential to the community, their function is heavily affected by their implementation:

Table 7.

*Model's parameter Dependent variable: Employee performance*

| Regression Model                 | Unstandardized Parameters |                    | Standardized parameters | t      | Sig.  |
|----------------------------------|---------------------------|--------------------|-------------------------|--------|-------|
|                                  | B                         | Standard Deviation | Beta                    |        |       |
| (Fixed)                          | 4.609                     | 0.28               |                         | 16.453 | 0     |
| Job Satisfaction                 | -0.04                     | 0.057              | -0.081                  | -0.697 | 0.487 |
| Job's Suitability to Flexibility | 0.008                     | 0.053              | 0.013                   | 0.152  | 0.879 |
| Attitude towards Flexible hours  | 0.053                     | 0.042              | 0.1                     | 1.264  | 0.208 |
| Satisfaction                     | 0.022                     | 0.044              | 0.044                   | 0.493  | 0.622 |
| Organizational Loyalty           | 0.189                     | 0.06               | 0.393                   | 3.146  | 0.002 |
| Job's Negative Effect            | 0.015                     | 0.03               | 0.035                   | 0.494  | 0.622 |
| Job Loyalty                      | 0.016                     | 0.059              | 0.031                   | 0.277  | 0.782 |

In the concluding portion of the subtle elements of table 7, the researcher is measurably seen to have a greater effect than some as representatives take the regression exam. The output is seen as the component's contingent hierarchical power and has a higher effect on implementation than alternative

components. Finally, the autonomous variable hierarchical stability decreases other free variables even though the association analysis has shown a noteworthy interaction. The key explanation for the regression analysis is to decide which variables affect each other and how much. In terms of the findings, hierarchical stability and implementation are closely matched in associations that adopt an adaptable work strategy. The researcher has observed that hierarchical commitment increases staff productivity and encourages representative reliability. The demands and desires of employees are increasingly changing. Jobs continue to boost their success and do further. When in skilled roles, you appear to be agreeable outside job methods that satisfy the expectations of the representatives and take into consideration a superior work-life adaptation is currently part of our lives. It is usually found that representatives, as well as managers, have constructive effects. Adaptability has become broader as the type of manufacturing is becoming less effective, and the specialized shift in market forms is growing value by advancement in online mechanization and data. Adapting to changing circumstances is the explanation for adaptable strategies of employment. Managers prefer adaptable job strategies to improve circumstances and extraordinary rivalries and decrease their work costs under changing monetary and market conditions.

Associations are expected to introduce modern working strategies to seize a favourable place on rivalries and control the corporate structures of members with their rewards and burden. People's states of mind against modern working models are certain that their lives are more suited to fill their behaviours and build their faithfulness. It proved necessary for organizations to retain technical association members Jobs with a good sense of authority expect to accomplish their responsibilities by putting in more time to take care of business. In summary, organizations must be provided adaptable work processes and retain members of strong hierarchical reliability. A 44-question analysis was included on the effect of the adaptable job approach on the execution of staff. The example was describing organizations with adaptable operating strategies. The overview should note the variables correlated with this Unfailing bureaucratic Inspiration for job success The adaptability of occupation states of mind against adaptable work hours steadfastness and the detrimental effect of the work paradigm and its impact on the work results.

Two hundred people addressed the summary, and the SPSS software was reviewed. The summary revealed an adaptable work scale with 32 questions and a single element in 7 sub-measurements and a deployment scale with 12 problems. A different analysis of the regression aimed to break down the effect on worker adoption of adaptable working strategies. The impacts of the independent variables were inspired by The suitability of the role for adaptability to work hours, adaptability faithfulness The detrimental influence of the profession and the hierarchical loyalty to and hugely in the needy vector execution is inspected There have been evaluations on a total of 44 factors and a valid consistency determination (alpha from Kronbach) has been resolved. 903 Network The relations between the test variables were inspected using association investigation about the investigating theory of speculation and the immediate or backhanded effects of adaptability on execution. It was found to be extremely dependable for members of organizations obtaining adaptable working practices. In this way, their application is heavily affected by The researchers reasoned that adaptable labour practices have a beneficial impact on work and existence after regressive experiments by estimating members' emotional uplifts against adaptable work environments. There are immediate and constructional effects with a 0.410\*\* association calculation. Additional administrators with an inspired state of mind for adaptable working hours increase the authoritative contribution of members and their gain for the execution of employees

The study of other adaptable working techniques indicates that the job efficiency and hierarchical durability are critically and favourably linked to the association of .7763\*\*. The analysis also shows a

positive association between hierarchical instability and occupation with a correlation estimate of .713\*\*. It is imaginary that various recognitions for implementation positively affect partnerships where there is a need to mould authoritative allegiance and members' trust in them. The correlation of the adjustable working factors as described above indicates a major relationship between hierarchy and fulfilment of jobs. We should assume that the suitability and authoritative commitment with an overlapping association of \*425\*\* are positive. There is also a strong relationship between an adaptable hour and hierarchical instability with a correlation estimate of 421\*\* and satisfaction and faithfulness with an approximate correlation of 396. Considering the statistical factors of the test, members involved in the analysis were listed as 1-5 years (15%) and between 6-10 years (43%) (22 percent) 11-15 years in sixteen years (20 percent).

Provided that the most impressive amount of representatives (43%) are 6-10 years old, educated by 22% of representatives, involving 11-15 years and 20% 16 years, we might claim that 85% of representatives have served for over 6 years. Further hierarchical contribution to adaptable job techniques is rendered. To reap the positive effects of the adaptable operating paradigm, those authoritative tests in organizations should also be revised. As we have already specified, steps against the harmful impacts corporations and culture might have on legislators because of these directions and adaptable ideas in the labour law are necessary.

### **Conclusions**

The proposal, The success and stability of businesses and organizations may be affected by flexible working environments. It helps influence the behaviour, actions and commitment of employees. In addition, when appropriately incorporated in the presence of company management and shareholders, this decent aspect will positively influence work-life balance that would be mirrored in their success and loyalty. Association and workers positive influences reparate and enhance function appropriately to employee demands and requirements, which can be accomplished by cooperating with all the employees. Below are several guidelines and feedback by directors and analysts focused on the study results. It is necessary to have versatile job plans to help members adapt their work-life to the association's obligations and reliability.

For organizations to obtain adaptable techniques to improve hierarchical commitment, it will be a significant advance. Many members have conceded that their association is a good working place. Faithful members have drawn attention to the role of hierarchical commitment in removing various discernments and factors and their capacity to recognize the supreme ability and articulating the pleasure of the job of this organization. A building link between hierarchical dedication and adaptable working practices. 'Building result on working life adaptation' Representatives nowadays add more value to the change of working lives than ever. This indicates that the hierarchy of members of associations with adaptable activities may be higher. Adaptable operating times which require representatives to delegate their landing and departure season to function are extremely beneficial for employees and associations that allow this high reliability.

Representatives who assume that adaptable working method positively impact work-life adaptation and taking advantage of this direction will not contribute to harmful results. The mutual analysis reveals the immediate and advantageous effects of an inspiring commitment to adaptable working processes about the hierarchical reliability of members. The correlation table indicates that the hypotheses produced before the exam began were important. The reciprocal exam does not endorse the conjecture for other sub reasons. The relation between adaptable and hierarchical faithful function



has been established more than that between other replacement components. We thoroughly inspect the effect of adaptable workplace processes explored within this analysis's framework on staff execution and suppose that hierarchy improves representative execution enormously. Factual testing using a larger example without partial containment could yield more generalizable results in future exams.

### **Recommendations**

This review. This analysis acknowledges two goals. Right off the bat, you can see what modules a segment accepts, and secondly, you can find out how scalable workflows affect the workflow methodology. Because of the revelations of this report, possible reactions to every other inquiry have been inspected in the above sections. The results from this study provided a range of key realistic recommendations to organizations about the right approach for executing various job strategies, with the overall aim that they will become a win for all organizations and delegates and that future gains in viability can be strengthened. The legitimate culture should automatically be available and thoroughly understood by the affiliation for part-time filling. Managers should create broad diagrams and adjust managers about perspectives, jobs and collaborators. Understandings should be coordinated and transmitted about sensitive work roles to minimize irritation or deterioration throughout the delegation conference, at such a level where delegates have a flexible filling experience as a genuine functional decision and believe that they have fulfilled all conditions for usage without impact. By actively promoting and separating itself from visual time in the work world, flexible work approaches can become an instrument for minimizing part of the burden in workers' lives.

Moreover, partnerships must consider how, for example, part-time employment is not satisfactory to objective the malevolent success of deeds to promote good outcomes, for example, sustained worker productivity. In a connotation where citizens are respected and persuaded of their injustice, people can be provoked to rebound or more successfully than otherwise, with support and hope proven on different measures. Similarly, they can attain greater general well-being by having their secluded living condition and being strengthened to develop a job and family agreement. About singular variables, this analysis stresses the implications of versatile job designs. Surprisingly, this aspect appears to obstruct most current exams in the sector when looking at the series of flexible working plans. In a few instances, the findings are the rather broad proportion of the time spent utilizing multifaceted job methods, such as definitive commitments, work/life shifts, expanded productivity, and business satisfaction. The disclosures of this examination indicate that an inappropriately revamped technique was employed throughout prior examinations. Recalling the true aim of optimizing several job methods, they can be seen as a bit of an inter-related and complex state of diverse identities and components that have a different effect on each other. Therefore, the effect of individual differentiations also provides a scene for inquiring into what is central to the achievement of diversified designs in solitary component areas.

In addition, the shortcomings of this review often provide implications for more study in the area. Immediately, while this study addresses flexible workflows only on the part of delegates and ignores the opinions of the institutions, the diversity of the organizations' values in potential analysis that is nearly similar can offer a wider view of the problem. Second, a more criticized community of respondents might consider a broader perception of the problem both in nationalities and professions. It will be particularly exciting to have respondents in different relations in various countries to get a wider viewpoint on Society about the diverse ways to function. Thirdly, a big event Quantitative analysis will give disclosures that could be outlined in the context of an examination such as the one

seen here. Combining this form of the exam with multiple subjective gatherings can yield thrilling results in partnerships across the globe.

### References

1. Hassan, M.I., Fouda, M.A., Hammad, K.M. and Hasaballah, A.I. (2013). Effects of midgut bacteria and two protease inhibitors on the transmission of *Wuchereria bancrofti* by the mosquito vector, *Culex pipiens*. *Journal of the Egyptian Society of Parasitology*. 43(2): 547-553.
2. Fouda, M.A., Hassan, M.I., Hammad, K.M. and Hasaballah, A.I. (2013). Effects of midgut bacteria and two protease inhibitors on the reproductive potential and midgut enzymes of *Culex pipiens* infected with *Wuchereria bancrofti*. *Journal of the Egyptian Society of Parasitology*. 43(2): 537-546.
3. Hasaballah, A.I. (2015). Toxicity of some plant extracts against vector of lymphatic filariasis, *Culex pipiens*. *Journal of the Egyptian Society of Parasitology*. 45(1): 183-192.
  - A. Alrosan, W. Alomoush, N. Norwawi, M. Alswaitti and S. N. Makhadmeh, "An improved artificial bee colony algorithm based on mean best-guided approach for continuous optimization problems and real brain mri images segmentation," *Neural Computing and Applications*, pp. 1-27, 2020.
4. Hasaballah, A.I. (2018). Impact of gamma irradiation on the development and reproduction of *Culex pipiens* (Diptera; Culicidae). *International journal of radiation biology*. 94(9): 844-849.
5. Hasaballah, A.I. (2021). Impact of paternal transmission of gamma radiation on reproduction, oogenesis, and spermatogenesis of the housefly, *Musca domestica* L. (Diptera: Muscidae). *International Journal of Radiation Biology*. 97(3): 376-385.
  - A. Jain, A. Kumar, and S. Sharma, "Comparative Design and Analysis of Mesh, Torus and Ring NoC," *Procedia Comput. Sci.*, vol. 48, pp. 330–337, 2015.
6. Jain, R. Dwivedi, A. Kumar, and S. Sharma, "Scalable design and synthesis of 3D mesh network on chip," *In Proceeding of International Conference on Intelligent Communication, Control and Devices*, 2017, 661–666.
7. Jain, A.K. Gahlot, R. Dwivedi, A. Kumar, and S.K. Sharma, "Fat Tree NoC Design and Synthesis," *In Intelligent Communication, Control and Devices*, Springer, 2018, pp. 1749–1756.
8. Jain, R. Dwivedi, A. Kumar, and S. Sharma, "Scalable design and synthesis of 3D mesh network on chip," *In Proceeding of International Conference on Intelligent Communication, Control and Devices*, 2017, pp. 661–666.
9. S.K. Sharma, A. Jain, K. Gupta, D. Prasad, and V. Singh, "An internal schematic view and simulation of major diagonal mesh network-on-chip," *J. Comput. Theor. Nanosci.*, vol. 16, no. 10, pp. 4412–4417, 2019.
10. D. Ghai, H.K. Gianey, A. Jain, and R.S. Uppal, "Quantum and dual-tree complex wavelet transform-based image watermarking," *Int. J. Mod. Phys. B*, 34(04), 2050009, 2020.
  - A. Jain and A. Kumar, "Desmogging of still smoggy images using a novel channel prior," *J. Ambient Intell. Humaniz. Comput.*, vol. 12, no. 1, pp. 1161–1177, 2021.

11. S. Kumar et al., "A Comparative Analysis of Machine Learning Algorithms for Detection of Organic and Nonorganic Cotton Diseases," *Math. Probl. Eng.*, vol. 2021, 2021.
12. N.R. Misra, S. Kumar, and A. Jain, "A Review on E-waste: Fostering the Need for Green Electronics," *In 2021 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS)*, 2021, 1032–1036.
  - A. Jain, R. Dwivedi, A. Kumar, and S. Sharma, "Network on chip router for 2D mesh design," *Int. J. Comput. Sci. Inf. Secur.*, vol. 14, no. 9, p. 1092, 2016.
13. Jain, A.K. AlokGahlot, and S.K.S. RakeshDwivedi, "Design and FPGA Performance Analysis of 2D and 3D Router in Mesh NoC," *Int. J. Control Theory Appl. IJCTA* ISSN, 0974–5572, 2017.
14. Bhardwaj, S. Kaur, A.P. Shukla, and M.K. Shukla, "Performance Comparison of Despeckling filters on the Basis of Incremental Iteration in Ultrasound Imaging," *In 2019 International Conference on Power Electronics, Control and Automation (ICPECA)*, 2019, pp. 1–5.
15. Bhardwaj, S. Kaur, A.P. Shukla, and M. K. Shukla, "A Novel Method for Despeckling of Ultrasound Images Using Cellular Automata-Based Despeckling Filter," *Int. J. E-Health Med. Commun. IJEHMC*, vol. 12, no. 5, pp. 16–35, 2021.
16. P. Verma, N. Shukla, and A.P. Shukla, "Techniques of Sarcasm Detection: A Review," *in 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, 2021, pp. 968–972.
17. S.K. Pal, A. Bhardwaj, and A.P. Shukla, "A Review on Despeckling Filters in Ultrasound Images for Speckle Noise Reduction," *in 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, 2021, 973–978.
18. P. Sharma and A.P. Shukla, "A Review on Brain Tumor Segmentation and Classification for MRI Images," *in 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, 2021, pp. 963–967.
19. D. Seal, A.P. Shukla, and A. Bhardwaj, "Effect of Iterative Variations on Despeckling Filters in Ultrasound Imaging," *In 2019 International Conference on Issues and Challenges in Intelligent Computing Techniques (ICICT)*, 2019, vol. 1, pp. 1–6.
20. N. Agrawal, A. Jain, and A. Agarwal, "Simulation of Network on Chip for 3D Router Architecture," *Int. J. Recent Technol. Eng.*, vol. 8, pp. 58–62, 2019.
21. Gupta, Pooja, Ambuj Kumar Agrawal, and Shahnaz Fatima. "Sign Language Problem and Solutions for Deaf and Dumb People." (2004).
22. Joshi M., Agarwal A.K., Gupta B. (2019) Fractal Image Compression and Its Techniques: A Review. In: Ray K., Sharma T., Rawat S., Saini R., Bandyopadhyay A. (eds) Soft Computing: Theories and Applications. *Advances in Intelligent Systems and Computing*, 742. Springer, Singapore. [https://doi.org/10.1007/978-981-13-0589-4\\_22](https://doi.org/10.1007/978-981-13-0589-4_22)
23. Agarwal, A. (2013). Implementation of Cylomatrix complexity matrix. *Journal of Nature Inspired Computing*, 1.
24. Agarwal, T., Agarwal, A.K., & Singh, S.K. (2014). Cloud computing security: issues and challenges. *In Proceedings of SMART* (pp. 10-14).

25. Saleem A., Agarwal A.K. (2016) Analysis and Design of Secure Web Services. In: Pant M., Deep K., Bansal J., Nagar A., Das K. (eds) Proceedings of Fifth International Conference on Soft Computing for Problem Solving. *Advances in Intelligent Systems and Computing*, 437. Springer, Singapore. [https://doi.org/10.1007/978-981-10-0451-3\\_41](https://doi.org/10.1007/978-981-10-0451-3_41)
26. N. Gupta and A.K. Agarwal, "Object Identification using Super Sonic Sensor: Arduino Object Radar," 2018 *International Conference on System Modeling & Advancement in Research Trends (SMART)*, 2018, 92-96, doi: 10.1109/SYSMART.2018.8746951.
27. S. Shukla, A. Lakhmani and A.K. Agarwal, "A review on integrating ICT based education system in rural areas in India," 2016 *International Conference System Modeling & Advancement in Research Trends (SMART)*, 2016, 256-259, doi: 10.1109/SYSMART.2016.7894531.
28. Tanvi, A., Agarwal, A.K., & Singh, S.K. *Study of Cloud Computing and its Security Approaches*.
29. Agarwal A.K., Rani L., Tiwari R.G., Sharma T., Sarangi P.K. (2021). Honey Encryption: Fortification Beyond the Brute-Force Impediment. In: Manik G., Kalia S., Sahoo S.K., Sharma T.K., Verma O.P. (eds) *Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering*. Springer, Singapore. [https://doi.org/10.1007/978-981-16-0942-8\\_64](https://doi.org/10.1007/978-981-16-0942-8_64)
30. Khullar V, Singh HP, Agarwal AK. Spoken buddy for individuals with autism spectrum disorder. *Asian J Psychiatr*. 2021 Aug; 62 102712. doi:10.1016/j.ajp.2021.102712. PMID: 34091205.
31. Agarwal, A.K., Jain, A., (2019), Synthesis of 2D and 3D NoC Mesh Router Architecture in HDL Environment, *Jour of Adv Research in Dynamical & Control Systems*, 11(04).
32. N.Andiyappillai and Dr.T.Prakash, "Implementing Warehouse Management Systems in Logistics: A Case Study," *Journal of Logistics, Supply Chain and Retail Management*, 2(1), 12-23, Feb. 2019, DOI:10.5281/zenodo.2576011
33. Gupta, Ravi Kumar. (2018). Employment Security and Occupational Satisfaction in India, *Journal of Advanced Research in Dynamical & Control System*, Volume 10, Issue 10.
34. N.Andiyappillai, "Data analytics in warehouse management systems (WMS) implementations—a case study," *International Journal of Computer Applications*, 181(47), 14-17, Apr 2019. doi:10.5120/ijca2019918542
35. Gupta, Ravi Kumar. (2019). Minimum Wage and Minimum Work Hour in India, *Journal of Advanced Research in Dynamical & Control System*, Vol. 11, 02-Special Issue, 2019
36. N.Andiyappillai, "Digital Transformation in Warehouse Management Systems (WMS) Implementations," *International Journal of Computer Applications*, 177(45), 34-37, Mar 2020. doi:10.5120/ijca2020919957
37. Mishra, Shivam Kumar & Gupta, Ravi Kumar (2021). Developing Effective Digital Marketing Strategies in Gaming Sector Through Gamers Response. *Empirical Economics Letters*, Vol. 20, Special Issue 1 June 2021.
38. N.Andiyappillai, "Standardization of System Integrated Solutions in Warehouse Management Systems (WMS) Implementations," *International Journal of Computer Applications*, 178(13), 6-11, May 2019. doi:10.5120/ijca2019918891

39. Agarwal, Akshata & Gupta, Ravi Kumar. (2021) Perception of Investors Regarding Mutual Funds as a Worthy Investment, *Empirical Economics Letters*, 20(2), June 2021.
40. N.Andiyappillai, "Factors Influencing the Successful Implementation of the Warehouse Management System (WMS)," *International Journal of Computer Applications*, Vol.177, Issue 32, 21-25, Jan 2020. doi: 10.5120/ijca2020919787
41. Vikram K, Sarat Kumar Sahoo, Sudhakar Babu, Srikanth Velpula, Dharmesh Rathod, "Power Systems Automation, Communication, and Information Technologies for Smart Grid: An Technical Aspects Review", *TELKOMNIKA Telecommunication, Computing, Electronics and Control*, 19(3), 2021.
42. <http://dx.doi.org/10.12928/telkomnika.v19i3.16428>
43. Alabdullah, T.T.Y., Ahmed, E.R., & Abushammala, S. (2020). Growth of Companies: Empirical Study of the Companies Listed in Developing Economies. *Journal of Accounting Science*, 4(2), 1-10.
44. Vikram.K, Sarat Kumar Sahoo, K.V.L. Narayana, "A Survey on Interference Avoiding Methods for Wireless Sensor Networks working in the 2.4GHz Frequency Band", 13(3), 59 – 81, *Journal of Engineering Science and Technology Review*, July-2020, DOI: 10.25103/jestr.133.08
45. Ahmed, E.R., Alabdullah, T.T.Y., Thottoli, M.M., & Maryanti, E. (2020). Does Corporate Governance Predict Firm Profitability? An Empirical Study in Oman. *The International Journal of Accounting and Business Society*, 28(1), 127-143.
46. Alabdullah, T.T.Y., Ahmed, E.R., & Nor, M.I. (2020). The World Declining Economy And Coronavirus Pandemic: Systems Should Be Continued. *Russian Journal of Agricultural and Socio-Economic Sciences(RJOAS)*, Vol. 6(102).
47. Vikram.K, Sarat Kumar Sahoo, "Interference-Aware Adaptive Transmission Power Control for ZigBee Wireless Networks" Vol. 828, Pg. No: 56-69, June-2018, *Communications in Computer and Information Science*, Springer.[https://doi.org/10.1007/978-981-10-8660-1\\_4](https://doi.org/10.1007/978-981-10-8660-1_4)
48. Alabdullah, T.T.Y. and Ahmed, E.R. (2018b). Corporate Governance: To What Extent it is important in the Arab Countries? *International Journal of Science and Research*, 7(11).
49. Alabdullah, T.T.Y., Ahmed, E.R. (2020). Audit Committee Impact on Corporate Profitability in Oman Companies: an Auditing and Management Accounting Perspective. *JURNAL Riset Akuntansi dan Keuangan Indonesia*, 4(2), 121-128.
50. Vikram.K, Sarat Kumar Sahoo, "A Collaborative Frame Work for Avoiding the Interference in 2.4GHz Frequency Band Smart Grid Applications" 22(1), 48-56, 2018. *Electronics Journal*. DOI: 10.7251/ELS1822048V
51. Vikram.K, Sarat Kumar Sahoo, K. Venkata Lakshmi Narayana, "Forward Error Correction based Encoding Technique for Cross-layer Multi Channel MAC protocol", 117, 847-854, September 2017, *Energy Procedia*. <https://doi.org/10.1016/j.egypro.2017.05.202>
52. Vikram. K, K. Venkata Lakshmi Narayana, A survey on Wireless Sensor Networks for Smart grid, *Sensors & Transducers Journal*, ISSN 1726-5479, U.K. 186(3), 18-24, 2015.
53. Metwaly, A.F., Rashad, M.Z., Omara, F.A., & Megahed, A.A. (2014). Architecture of multicast centralized key management scheme using quantum key distribution and classical symmetric encryption. *The European Physical Journal Special Topics*, 223(8), 1711-1728.

54. Farouk, A., Zakaria, M., Megahed, A., & Omara, F.A. (2015). A generalized architecture of quantum secure direct communication for N disjointed users with authentication. *Scientific reports*, 5(1), 1-17.
55. Naseri, M., Raji, M.A., Hantehzadeh, M.R., Farouk, A., Boochani, A., & Solaymani, S. (2015). A scheme for secure quantum communication network with authentication using GHZ-like states and cluster states controlled teleportation. *Quantum Information Processing*, 14(11), 4279-4295.
56. Wang, M.M., Wang, W., Chen, J.G., & Farouk, A. (2015). Secret sharing of a known arbitrary quantum state with noisy environment. *Quantum Information Processing*, 14(11), 4211-4224.
57. Zhou, N.R., Liang, X.R., Zhou, Z.H., & Farouk, A. (2016). Relay selection scheme for amplify-and-forward cooperative communication system with artificial noise. *Security and Communication Networks*, 9(11), 1398-1404.
58. Zhou, N.R., Li, J.F., Yu, Z.B., Gong, L.H., & Farouk, A. (2017). New quantum dialogue protocol based on continuous-variable two-mode squeezed vacuum states. *Quantum Information Processing*, 16(1), 1-16.
59. Abdolmaleky, M., Naseri, M., Batle, J., Farouk, A., & Gong, L.H. (2017). Red-Green-Blue multi-channel quantum representation of digital images. *Optik*, 128, 121-132.
60. Naseri, M., Heidari, S., Baghfalaki, M., Gheibi, R., Batle, J., Farouk, A., & Habibi, A. (2017). A new secure quantum watermarking scheme. *Optik*, 139, 77-86.
61. Heidari, S., Naseri, M., Gheibi, R., Baghfalaki, M., Pourarian, M.R., & Farouk, A. (2017). A new quantum watermarking based on quantum wavelet transforms. *Communications in theoretical Physics*, 67(6), 732.
62. Nagata, K., Nakamura, T., & Farouk, A. (2017). Quantum cryptography based on the Deutsch-Jozsa algorithm. *International Journal of Theoretical Physics*, 56(9), 2887-2897
63. Nagata, K., Nakamura, T., Geurdes, H., Batle, J., Abdalla, S., & Farouk, A. (2018). Creating Very True Quantum Algorithms for Quantum Energy Based Computing. *International Journal of Theoretical Physics*, 57(4), 973-980.
64. Abulkasim, H., Farouk, A., Hamad, S., Mashatan, A., & Ghose, S. (2019). Secure dynamic multiparty quantum private comparison. *Scientific reports*, 9(1), 1-16.
65. Abulkasim, H., Alsuqaih, H.N., Hamdan, W.F., Hamad, S., Farouk, A., Mashatan, A., & Ghose, S. (2019). Improved dynamic multi-party quantum private comparison for next-generation mobile network. *IEEE Access*, 7, 17917-17926
66. Farouk, A., Alahmadi, A., Ghose, S., & Mashatan, A. (2020). Blockchain platform for industrial healthcare: Vision and future opportunities. *Computer Communications*, 154, 223-235.
67. Zhu, F., Zhang, C., Zheng, Z., & Farouk, A. (2021). Practical Network Coding Technologies and Softwarization in Wireless Networks. *IEEE Internet of Things Journal*, 8(7), 5211-5218.
68. D.K. Sharma, B. Singh, R. Regin, R. Steffi and M.K. Chakravarthi, "Efficient Classification for Neural Machines Interpretations based on Mathematical models," *2021 7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, 2021, 2015-2020, doi: 10.1109/ICACCS51430.2021.9441718

69. Ujjainiya, L., & Chakravarthi, M.K. (2015). Raspberry-Pi based cost effective vehicle collision avoidance system using image processing. *ARPJ. Eng. Appl. Sci*, 10(7).
70. Chakravarthi, M.K., Tiwari, R.K., & Handa, S. (2015). Accelerometer based static gesture recognition and mobile monitoring system using neural networks. *Procedia Computer Science*, 70, 683-687.
71. Chakravarthi, M.K., Pannem, V.K., & Venkatesan, N. (2014). Real time implementation of gain scheduled controller design for higher order nonlinear system using LabVIEW. *International Journal of Engineering and Technology*, 6(5), 2031-2038.
72. Chakravarthi, M.K., & Venkatesan, N. (2015). Experimental validation of a multi model PI controller for a non linear hybrid system in LabVIEW. *Telkomnika*, 13(2), 547.
73. Chakravarthi, M.K., Gupta, K., Malik, J., & Venkatesan, N. (2015, December). Linearized PI controller for real-time delay dominant second order nonlinear systems. In *2015 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT)*, 236-240.
74. Ganesh, D., Naveed, S.M.S., & Chakravarthi, M.K. (2016). Design and Implementation of Robust Controllers for an Intelligent Incubation Pisciculture System. *Indonesian Journal of Electrical Engineering and Computer Science*, 1(1), 101-108.
75. Wisetsri, W.(2020).The Perception of Brand Personality in the Context of Hotel of Undergraduate Students. *Journal of Multidisciplinary in Humanities and Social Sciences*, 3(1): 1-12.
76. Pannem, V.K., Kalyan Chakravarthi, M., & Venkatesan, N. (2015). Validation of integer and fractional order PI controllers for a real time non linear process. In *2015 Global Conference on Communication Technologies (GCCT)*, 84-89.
77. Mohammed, S., Naveed, S., Chakravarthi, M.K., & Venkatesan, N. (2015). Comparative study of controller performance for different real-time hybrid models. In *2015 Global Conference on Communication Technologies (GCCT)*, 39-44.
78. Wisetsri, W., & Maaz, U.D. (2020). The Influence of Leadership, Work Motivation and Organizational Culture on Job Performance. *International Journal of Psychosocial Rehabilitation*, 24(5): 7336-7350. doi:10.37200/IJPR/V24I5/PR2020768
79. Chakravarthi, M.K., Vinay, P.K., & Venkatesan, N. (2015). Design and simulation of internal model controller for a real time nonlinear process. *Indian Journal of Science and Technology*, 8(19), 1-6.
80. Chakravarthi, M.K., & Venkatesan, N. (2015). Design and Implementation of Lab View Based Optimally Tuned PI Controller for A Real Time Non Linear Process. *Asian Journal of Scientific Research*, 8(1), 95.
81. Venkatasreehari, R., & Chakravarthi, M.K. (2014). Industrial pollution monitoring GUI system using internet, LabVIEW AND GSM. In *2014 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT)*, 787-791.
82. Wisetsri, W. (2017). *Man And Society* (1st ed). Bangkok: King Mongkut's University of Technology North Bangkok.

83. Sekhar, C., Kranthi, K., & Chakravarthi, M.K. (2017). Traffic signal breach vehicle stop system using IOT. *In 2017 International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2)*, 296-300.
84. Ujjainiya, L., Chakravarthi, M.K., & Soni, A. (2014). Development and implementation of gesture controlled automatic audio system. *International Journal of Computer Applications*, 106(13).
85. Chakravarthi, M.K., & Venkatesan, N. (2018). Adaptive type-2 fuzzy controller for nonlinear delay dominant MIMO systems: an experimental paradigm in LabVIEW. *International Journal of Advanced Intelligence Paradigms*, 10(4), 354-373.
86. Vijai C.& Wisetsri, W.(2021). Rise of Artificial Intelligence in Healthcare Startups in India. *Advances In Management*. 14(1) March (2021): 48-52.
87. Ruttala, U.K., Balamurugan, M.S., & Chakravarthi, M.K. (2015). NFC based smart campus payment system. *Indian Journal of Science and Technology*, 8(19).
88. A.K. Gupta. "Effect of Various Incremental Conductance MPPT Methods on the Charging of Battery Load Feed by Solar Panel," in *IEEE Access*, 9, 90977-90988, 2021, doi: 10.1109/ACCESS.2021.3091502.
89. W. Wisetsri, "The Perception of Brand Personality in the Context of Hotel of Undergraduate Students", vol. 3, no. 1, pp. 1-12, Jun. 2020.
90. Ganesh, D., & Chakravarthi, M.K. (2014). Remote web based monitoring and controlling of a nonlinear process using micro controller. *In 2014 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT)* (pp. 767-770). IEEE.
91. Listiningrum, H.D., Wisetsri, W., & Boussanlegue, T. (2020). Principal's Entrepreneurship Competence in Improving Teacher's Entrepreneurial Skill in High Schools. *Journal of Social Work and Science Education*, 1(1), 87-95.
92. Chakravarthi, M.K., & Vinay, P. (2014). LabVIEW based Comparison of various Edge Detection Techniques for Bug Classification. *International Journal of Applied Engineering Research*, 9(19), 6381-6390.
93. N.A. Jalil, H.J. Hwang, and N.M. Dawi, "Machines learning trends, perspectives and prospects in education sector," in *ACM International Conference Proceeding Series*, 2019.
94. A.K. Gupta, , T. Maity, H. Anandakumar, and Y.K Chauhan, "An electromagnetic strategy to improve the performance of PV panel under partial shading," *Computers & Electrical Engineering*, 90, 106896. 2021.
95. Kumar, S., Kumar, P., Wisetsri, W., Raza, M. & Norabuena-Figueroa, R.P. (2021). Social entrepreneurship education: Insights from the indian higher educational courses. *Academy of Strategic Management Journal*, 20(S1),1-14.
96. Wisetsri, W. (2017). Spornosexual: Self-Esteem theory, present body characteristics by online media. *Research and Development Journal Suan Sunandha Rajabhat University*, 9(2): 24- 33.
97. N.A. Jalil, P. Prapinit, M. Melan, and A. Bin Mustaffa, "Adoption of business intelligence - Technological, individual and supply chain efficiency," in *Proceedings - 2019 International Conference on Machine Learning, Big Data and Business Intelligence, MLDBDI 2019*.



98. A.K. Gupta, Y.K. Chauhan, and T Maity, "Experimental investigations and comparison of various MPPT techniques for photovoltaic system," *Sādhanā*, 43(8), 1-15, 2018.
99. N.A. Jalil and H.J. Hwang, "Technological-centric business intelligence: Critical success factors," *Int. J. Innov. Creat. Chang.*, 2019.
100. A.K. Gupta, "Sun Irradiance Trappers for Solar PV Module to Operate on Maximum Power: An Experimental Study," *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, Vol. 12, no.5, pp.1112-1121, 2021.
101. N.A. Jalil and K. Kian Yeik, "Systems, design and technologies anxieties towards use of self-service checkout," in *ACM International Conference Proceeding Series*, 2019.
102. A.K. Gupta, Y.K Chauhan, and T Maity and R Nanda, "Study of Solar PV Panel Under Partial Vacuum Conditions: A Step Towards Performance Improvement," *IETE Journal of Research*, 1-8, 2020.
103. Singh, N.A. Jalil, D.K. Sharma, S.R, K. Kumar and D. Jebakumar immanuel, "Computational systems overview and Random Process with Theoretical analysis," *2021 7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, 2021, 1999-2005, doi: 10.1109/ICACCS51430.2021.9441739.
104. A.K. Gupta, Y.K Chauhan, and T Maity, "A new gamma scaling maximum power point tracking method for solar photovoltaic panel Feeding energy storage system," *IETE Journal of Research*, vol.67, no.1, pp.1-21, 2018.
105. U. Zulfiqar, S. Mohy-Ul-Din, A. Abu-Rumman, A.E.M. Al-Shraah, And I. Ahmed, "Insurance-Growth Nexus: Aggregation and Disaggregation," *The Journal of Asian Finance, Economics and Business*, vol. 7, no. 12, pp. 665–675, Dec. 2020. <https://doi.org/10.13106/jafeb.2020.vol7.no12.665>
106. Al-Shqairat, Z.I., Al Shraah, A.E.M., Abu-Rumman, A., "The role of critical success factors of knowledge stations in the development of local communities in Jordan: A managerial perspective," *Journal of management Information and Decision Sciences*, 23(5), 510-526, Dec. 2020. DOI: 1532-5806-23-5-218
107. Esmail, J., Rjoub, H., & Wong, W.K. (2020). Do Oil Price Shocks and Other Factors Create Bigger Impacts on Islamic Banks than Conventional Banks? *Energies*, 13(12), 3106.
108. Alwreikat, A.A., & Rjoub, H. (2020). Impact of mobile advertising wearout on consumer irritation, perceived intrusiveness, engagement and loyalty: A partial least squares structural equation modelling analysis. *South African Journal of Business Management*, 51(1), 11.
109. Alhodiry, A., Rjoub, H., & Samour, A. (2021). Impact of oil prices, the US interest rates on Turkey's real estate market. New evidence from combined co-integration and bootstrap ARDL tests. *Plos one*, 16(1), e0242672.
110. Yıldız, B.F., Hesami, S., Rjoub, H., & Wong, W.K. (2021). Interpretation Of Oil Price Shocks on Macroeconomic Aggregates of South Africa: Evidence From SVAR. *Journal of Contemporary Issues in Business and Government*, 27(1), 279-287.
111. Shaheen, R., Ağa, M., Rjoub, H., & Abualrub, A. (2020). Investigation of the Pillars of Sustainability Risk Management as an Extension of Enterprise Risk Management on Palestinian Insurance Firms' Profitability. *Sustainability*, 12(11), 4709.

112. Hesami, Siamand, Bezhan Rustamov, Husam Rjoub, and Wing-Keung Wong. "Implications of Oil Price Fluctuations for Tourism Receipts: The Case of Oil Exporting Countries." *Energies*, 13(17) (2020): 4349.
113. Ibnou-Laaroussi, S., Rjoub, H., & Wong, W.K. (2020). Sustainability of Green Tourism Among International Tourists and Its Influence on the Achievement of Green Environment: Evidence from North Cyprus. *Sustainability*, 12(14), 5698.
114. Alfadli, A., & Rjoub, H. (2020). The impacts of bank-specific, industry-specific and macroeconomic variables on commercial bank financial performance: evidence from the Gulf cooperation council countries. *Applied Economics Letters*, 27(15), 1284-1288.
115. Alkhurshan, M., & Rjoub, H. (2020). The scope of an integrated analysis of trust switching barriers, customer satisfaction and loyalty. *Journal of Competitiveness*, 12(2), 5.
116. Erülgen, A., Rjoub, H., & Adalier, A. (2020). Bank Characteristics Effect on Capital Structure: Evidence from PMG and CS-ARDL. *Journal of Risk and Financial Management*, 13(12), 310.
117. Pandya, S.; Ambient Acoustic Event Assistive Framework for Identification, Detection, and Recognition of Unknown Acoustic Events of a Residence, *Advanced Engineering Informatics*. Elsevier.
118. <http://www.sciencedirect.com/science/article/pii/S147403462030207X>
119. Ghayvat, H.; Pandya, S.; Awais, M. ReCognizing SUSpect and PredictiNg THE SpRead of Contagion Based on Mobile Phone LoCation DaTa (COUNTERACT): A System of identifying COVID-19 infectious and hazardous sites, detecting disease outbreaks based on internet of things, edge computing and artificial intelligence, *Sustainable Cities and Society*.
120. Pandya S, Wakchaure MA, Shankar R, Annam JR. Analysis of NOMA-OFDM 5G wireless system using deep neural network. *The Journal of Defense Modeling and Simulation*. 2021. doi:10.1177/1548512921999108.
121. Awais, M.; Ghayvat, H.; Krishnan Pandarathodiyil, A.; Nabillah Ghani, W.M.; Ramanathan, A.; Pandya, S.; Walter, N.; Saad, M.N.; Zain, R.B.; Faye, I. Healthcare Professional in the Loop (HPIL): Classification of Standard and Oral Cancer-Causing Anomalous Regions of Oral Cavity Using Textural Analysis Technique in Autofluorescence Imaging. *Sensors*, 2020, 20, 5780. <https://doi.org/10.3390/s20205780>
122. Patel, C.I., Labana, D., Pandya, S., Modi, K., Ghayvat, H., Awais, M. Histogram of Oriented Gradient-Based Fusion of Features for Human Action Recognition in Action Video Sequences. *Sensors* 2020, 20, 7299. <https://doi.org/10.3390/s20247299>
123. Rao, A.N., Vijayapriya, P., Kowsalya, M., & Rajest, S.S. (2020). Computer Tools for Energy Systems. In *International Conference on Communication, Computing and Electronics Systems* (pp. 475-484). Springer, Singapore.
124. Gupta J., Singla M.K., Nijhawan P., Ganguli S., Rajest S.S. (2020) An IoT-Based Controller Realization for PV System Monitoring and Control. In: Haldorai A., Ramu A., Khan S. (eds) *Business Intelligence for Enterprise Internet of Things*. *EAI/Springer Innovations in Communication and Computing*. Springer, Cham
125. Sharma M., Singla M.K., Nijhawan P., Ganguli S., Rajest S.S. (2020) An Application of IoT to Develop Concept of Smart Remote Monitoring System. In: Haldorai A., Ramu A.,

- Khan S. (eds) Business Intelligence for Enterprise Internet of Things. *EAI/Springer Innovations in Communication and Computing*. Springer, Cham
126. Ganguli S., Kaur G., Sarkar P., Rajest S.S. (2020) An Algorithmic Approach to System Identification in the Delta Domain Using FAdFPA Algorithm. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. *EAI/Springer Innovations in Communication and Computing*. Springer, Cham.
127. Singla M.K., Gupta J., Nijhawan P., Ganguli S., Rajest S.S. (2020) Development of an Efficient, Cheap, and Flexible IoT-Based Wind Turbine Emulator. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. *EAI/Springer Innovations in Communication and Computing*. Springer, Cham.
128. Rajasekaran R., Rasool F., Srivastava S., Masih J., Rajest S.S. (2020) Heat Maps for Human Group Activity in Academic Blocks. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. *EAI/Springer Innovations in Communication and Computing*. Springer, Cham
129. D.S. Hooda, Keerti Upadhyay and D.K. Sharma, "On Parametric Generalization of 'Useful' R- norm Information Measure" *British Journal of Mathematics & Computer Science*, 8(1), 1-15, 2015.
130. D.S. Hooda, Keerti Upadhyay and D.K. Sharma, "A Generalized Measure of 'Useful R-norm Information", *International Journal of Engineering Mathematics and Computer Sciences*, 3(5), 1-11, 2014.
131. D.S. Hooda, Keerti Upadhyay and D.K. Sharma, "Bounds on Cost Measures in terms of 'Useful' R-norm Information Measures" *Direct Research Journal of Engineering and Information Technology*, 2(2), 11-17, 2014.
132. D.S. Hooda and D.K. Sharma, "Lower and Upper Bounds Inequality of a Generalized 'Useful' Mean Code Length" *GAMS Journal of Mathematics and Mathematical Biosciences*, 4(1), 62-69, 2013.
133. D.S. Hooda, Keerti Upadhyay and D.K. Sharma. Useful' R-Norm Information Measure and its Properties. *IOSR Journal of Electronics and Communication Engineering*, 8, 52-57, 2013.
134. D.S. Hooda, Sonali Saxena and D.K. Sharma, "A Generalized R-Norm Entropy and Coding Theorem" *International Journal of Mathematical Sciences and Engineering Applications*, 5(2), 385-393, 2011.
135. Ghayvat, H.; Awais, M.; Pandya, S.; Ren, H.; Akbarzadeh, S.; Chandra Mukhopadhyay, S.; Chen, C.; Gope, P.; Chouhan, A.; Chen, W. Smart Aging System: Uncovering the Hidden Wellness Parameter for Well-Being Monitoring and Anomaly Detection. *Sensors* 2019, 19, 766. <https://doi.org/10.3390/s19040766>.
136. Barot, V., Kapadia, V., & Pandya, S., QoS Enabled IoT Based Low Cost Air Quality Monitoring System with Power Consumption Optimization, *Cybernetics and Information Technologies*, 2020, 20(2), 122-140. <https://doi.org/10.2478/cait-2020-0021>.
137. Sur, A., Sah, R., Pandya, S., Milk storage system for remote areas using solar thermal energy and adsorption cooling, *Materials Today*, Volume 28, Part 3, 2020, Elsevier, Pages 1764-1770, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.05.170>.

138. H. Ghayvat, Pandya, S., and A. Patel, "Deep Learning Model for Acoustics Signal Based Preventive Healthcare Monitoring and Activity of Daily Living," *2nd International Conference on Data, Engineering and Applications (IDEA)*, Bhopal, India, 2020, pp. 1-7, doi: 10.1109/IDEA49133.2020.9170666
139. Pandya, S., Shah, J., Joshi, N., Ghayvat, H., Mukhopadhyay, S.C. and Yap, M.H., 2016, November. A novel hybrid based recommendation system based on clustering and association mining. In *Sensing Technology (ICST), 2016 10th International Conference on*, (pp. 1-6). IEEE.
140. Pandya, S., W. Patel, H. Ghayvat, "NXTGeUH: Ubiquitous Healthcare System for Vital Signs Monitoring & Falls Detection", *IEEE International Conference, Symbiosis International University*, December 2018.
141. Ghayvat, H., Pandya, S., "Wellness Sensor Network for modeling Activity of Daily Livings-Proposal and Off-Line Preliminary Analysis" *IEEE International Conference, Galgotias University*, New Delhi, December 2018.
142. Pandya, S., Ghayvat, H., Shah, J., Joshi, N., A Novel Hybrid based Recommendation System based on Clustering and Association Mining, *10th IEEE International Conference on Sensing technology and Machine Intelligence (ICST-2016)*, Nanjing, China, November 2016.
143. Pandya, S., W. Patel, An Adaptive Approach towards designing a Smart Health-care Real-Time Monitoring System based on IoT and Data Mining, *3rd IEEE International Conference on Sensing technology and Machine Intelligence (ICST- 2016)*, Dubai, November 2016.
144. Pandya, S., Ghayvat, H., Kotecha, K., Wandra, K., Advanced AODV Approach For Efficient Detection And Mitigation of WORMHOLE Attack IN MANET, *10th IEEE International Conference on Sensing technology and Machine Intelligence (ICST-2016)*, Nanjing, China, November 2016.
145. Pandya, S., H. Dandvate —New Approach for frequent item set generation based on Mirabit Hashing Algorithm, *IEEE International Conference on Inventive Computation technologies (ICICT)*, 26 August, India, 2016.
146. Pandya, S., Patel, W., Mistry, V., i-MsRTRM: Developing an IoT based iNTELLIGENT Medicare System for Real-time Remote Health Monitoring, *8th IEEE International Conference on Computational Intelligence and Communications Networks (CICN-2016)*, Tehari, India, 23-25th December 2016.
147. Pandya, S., Shah, J., Joshi, N., Ghayvat, H., Mukhopadhyay, S.C. and Yap, M.H., 2016, November. A novel hybrid based recommendation system based on clustering and association mining. In *Sensing Technology (ICST), 2016 10th International Conference on* (pp. 1-6). IEEE.
148. Suman Rajest S, Dr.P. Suresh, "The Problematizing of History Concentrated on The Poetics of Historiographic Metafiction by Postmodernism and How It Influences Postmodern Fiction" in *International Journal of Pure and Applied Mathematics (IJPAM)*, Volume: 119, Special Issue 16, July 2018, Page No.: 2457-2469.
149. Suman Rajest S, Dr.P. Suresh, "Themes and Techniques from Modernism to Postmodernism: The Dubious Continuance of Gravity's Rainbow" in *International Journal of Pure and Applied Mathematics*, Volume: 119, Special Issue 16, July 2018, 2373-2384.

150. Suman Rajest S, Dr.P. Suresh, "Absurd Realism and Structure in Thomas Pynchon's The Crying of Lot 49" in *Journal of Advanced Research in Dynamical and Control Systems*, Volume: 10, Special Issue 11, August 2018, Page No.: 571-580.
151. Suman Rajest S, Dr.P. Suresh, "The Deducible Teachings Of Historiographic Metafiction Of Modern Theories of Both Fiction and History" in *Eurasian Journal of Analytical Chemistry*, 13(04), July 2018, 110-117.
152. Suman Rajest S, Dr.P. Suresh, "The Dialog on Postmodernism Intertextuality, Parody, The Talk of History and The Issue of Reference" in *International Journal of Recent Technology and Engineering*, 7(5C), February 2019, 244-7.
153. Suman Rajest S, Dr.P. Suresh, "An Analysis of Psychological Aspects in Student-Centered Learning Activities and Different Methods" in *Journal of International Pharmaceutical Research*, 46(01), 2019, 165-172.
154. Md. Salamun Rashidin, Sara Javed, Bin Liu, Wang Jian, Suman Rajest S, "Insights: Rivals Collaboration on Belt and Road Initiatives and Indian Recourses" in *Journal of Advanced Research in Dynamical and Control Systems*, Volume: 11, Special Issue 04, 2019, 1509-1522.
155. Laxmi Lydia, E., Kannan, S., SumanRajest, S. and Satyanarayana, S. (2020) 'Correlative study and analysis for hidden patterns in text analytics unstructured data using supervised and unsupervised learning techniques', *Int. J. Cloud Computing*, Vol. 9, Nos. 2/3, pp.150–162.
156. Dr. Laxmi Lidiya. S. Suman, Rajest, "Correlative Study and Analysis for Hidden Patterns in Text Analytics Unstructured Data using Supervised and Unsupervised Learning techniques" *International Journal of Cloud Computing (IJCC)*, Vol. 9, No. 2/3, 2020.
157. Dr. P.S. Venkateswaran, Dr. A. Sabarirajan, S. Suman Rajest And R. Regin (2019) "The Theory of the Postmodernism in Consumerism, Mass Culture and Globalization" in *The Journal of Research on the Lepidoptera* Volume 50 (4): 97-113
158. Desfiandi, A., Suman Rajest, S., S. Venkateswaran, P., Palani Kumar, M., & Singh, S. (2019). Company Credibility: A Tool To Trigger Positive Csr Image In The Cause-Brand Alliance Context In Indonesia. *Humanities & Social Sciences Reviews*, 7(6), 320-331.
159. K.B. Adanov, S. Suman Rajest, Mustagaliyeva Gulnara, Khairzhanova Akhmaral (2019), "A Short View on the Backdrop of American's Literature". *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 11, No. 12, pp. 182-192.
160. D Datta, S Mishra, SS Rajest, (2020) "Quantification of tolerance limits of engineering system using uncertainty modeling for sustainable energy" *International Journal of Intelligent Networks*, Vol.1, 2020, 1-8. <https://doi.org/10.1016/j.ijin.2020.05.006>
161. Leo Willyanto Santoso, Bhopendra Singh, S. Suman Rajest, R. Regin, Karrar Hameed Kadhim (2021), "A Genetic Programming Approach to Binary Classification Problem" *EAI Endorsed Transactions on Energy*, 8, 31, 1-8. DOI: 10.4108/eai.13-7-2018.165523
162. Ismail Raisal and S. Suman Rajest Ardhariksa Zukhruf Kurniullah, Anjali Kulkarni, Nordiana Ahmad Nordin, Roy Setiawan, Girish Bagale, Rajesh Deb Barman, "Positive Outcomes of Human Resources Engagement and Impact on Motivation", *Productivity Management*, Vol.25, No.1S, pp. 638-667, 2020.

163. Girish Bagale and S. Suman Rajest Roy Setiawan, Vijay D. Kulkarni, Mahmoud Al-Odeh, Nordiana Ahmad Nordin, S. Sam Santhose, Ismail Raisal, "The Impact of Corporate Reputation on Organizational Performance" *Productivity Management*, 25(1S), 668-681, 2020.
164. Roy Setiawan, Kanchan Rani, Luigi Pio Leonardo Cavaliere, Ngo Tan Hiep, Sudipta Halder, Ismail Raisal, Ruby Mishra, and S. Suman Rajest, "References for Shopping Online Versus in Stores What Do Customers Prefer and How Do Offline Retailers Cope with It?" *Productivity Management*, Vol.25, No.1S, pp. 874-898, 2020.
165. Dr. S. Suman Rajest Dr. Bhopendra Singh, P. Kavitha, R. Regin, Dr.K. Praghash, S. Sujatha, "Optimized Node Clustering based on Received Signal Strength with Particle Ordered-filter Routing Used in VANET" *Webology*, 17(2), 262-277, 2020.
166. Sooraj Kumar Maurya, Professor Vipin Jain, Roy Setiawan, Alliyarov Ashraf, Kartikey Koti, K.Niranjan, Nik Alif Amri Nik Hashim, and S. Suman Rajest, "The Conditional Analysis of Principals Bullying Teachers Reasons in The Surroundings of The City", *Productivity Management*, Vol.25, No.5, 1195-1214, 2020.
167. Roy Setiawan, Keshav Nath, Luigi Pio Leonardo Cavaliere, Klinge Orlando Villalba-Condori, Dennis Arias-Chavez, Kartikey Koti, Girish Bagale, and S. Suman Rajest, "The Impact of Teaching Innovative Strategy on Academic Performance in High Schools" *Productivity Management*, Vol.25, No.5, 1296-1312, 2020.
168. K.K.D. Ramesh, G. Kiran Kumar, K. Swapna, Debabrata Datta, and S. Suman Rajest, "A Review of Medical Image Segmentation Algorithms", *EAI Endorsed Transactions on Pervasive Health and Technology*, 2021, doi: 10.4108/eai.12-4-2021.169184
169. R. Regin, S. Suman Rajest and Bhopendra Singh, "Fault Detection in Wireless Sensor Network Based on Deep Learning Algorithms", *EAI Endorsed Transactions on Scalable Information Systems*, 2021, <https://eudl.eu/doi/10.4108/eai.3-5-2021.169578>
170. Worakamol Wisetsri, Krishnabhaskar Mangalasserri, Luigi Pio Leonardo Cavaliere, Praveen Mittal, M. Kalyan Chakravarthi, Kartikey Koti, Ashish Gupta, S. Suman Rajest, R. Regin, "The Impact of Marketing Practices on NGO Performance: The Pestel Model Effect", *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Volume 12, Issue 3, July 2021:2884-2903.
171. S. Suman Rajest, D.K. Sharma, R. Regin and Bhopendra Singh, "Extracting Related Images from E-commerce Utilizing Supervised Learning", *Innovations in Information and Communication Technology Series*, 033-045, 28 February, 2021.
172. Souvik Ganguli, Abhimanyu Kumar, Gagandeep Kaur, Prasanta Sarkar and S. Suman Rajest, "A global optimization technique for modeling and control of permanent magnet synchronous motor drive", *Innovations in Information and Communication Technology Series*, 074-081, 28 February, 2021.
173. Jappreet Kaur, Tejpal Singh Kochhar, Souvik Ganguli and S. Suman Rajest, "Evolution of Management System Certification: An overview", *Innovations in Information and Communication Technology Series*, pp. 082-092, 28 February, 2021.
174. R. Regin, S. Suman Rajest and Bhopendra Singh, "Spatial Data Mining Methods Databases and Statistics Point of Views", *Innovations in Information and Communication Technology Series*, 103-109, 28 February, 2021.

175. Roy Setiawan, V. Ramesh Kumar, M. Kalyan Chakravarthi, Klinge Orlando Villalba-Condori, Cesar Gonzalo Vera-Vasquez, Tamil Selvan Subramaniam, Kartikey Koti, S. Suman Rajest, Regin Rajan., The Empirical Results of Conditional Analysis of Principals' Reasons in Bullying Teachers, *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Volume 12, Issue 3, July 2021:2737- 2756.
176. Luigi Pio Leonardo Cavaliere, Balbir Singh, M Jagadish Kumar, Kartikey Koti, M. Kalyan Chakravarthi, S. Arun, S. Suman Rajest, R. Regin, Sonia Singh., Achieving United Nations Goals Throughout the Youth Leadership, *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Volume 12, Issue 3, July 2021:2859- 2883.
177. Roy Setiawan, Luigi Pio Leonardo Cavaliere, Arup Roy Chowdhury, Kartikey Koti, Praveen Mittal, Tamil Selvan Subramaniam, S. Suman Rajest, R. Regin, Sonia Singh, "The Impact of Motivation on Employees Productivity in The Retail Sector: The Mediating Effect of Compensation Benefits" *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Volume 12, Issue 6, July, 2021: 8159-8190.
178. Luigi Pio Leonardo Cavaliere, N. Subhash, P. Venkata Durga Rao, Praveen Mittal, Kartikey Koti, M. Kalyan Chakravarthi, R. Duraipandian, S. Suman Rajest, R. Regin, "The Impact of Internet Fraud on Financial Performance of Banks", *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Volume 12, Issue 6, July, 2021: 8126-8158.
179. Roy Setiawan, Luigi Pio Leonardo Cavaliere, Kartikey Koti, Gabriel Ayodeji Ogunmola, Nasir Abdul Jalil, M. Kalyan Chakravarthi, S. Suman Rajest, R. Regin, Sonia Singh, "The Artificial Intelligence and Inventory Effect on Banking Industrial Performance" *Turkish Online Journal of Qualitative Inquiry (TOJQI)*. Volume 12, Issue 6, July, 2021: 8100-8125.
180. Luigi Pio Leonardo Cavaliere, Ajay Poddar, Shobhna Poddar, Satuluri Padma, Kartikey Koti, M. Kalyan Chakravarthi, S. Suman Rajest, R. Regin, "Emotional Intelligence and Driving Change in Public Sector: The Mediating Role of Culture", *Turkish Online Journal of Qualitative Inquiry (TOJQI)*. Volume 12, Issue 7, July, 2021: 2071 - 2115.
181. D.S. Hooda and D.K. Sharma, "Bounds on Two Generalized Cost Measures" *Journal of Combinatorics, Information & System Sciences*, Vol. 35(3-4), pp. 513-530, 2010.
182. D.K. Sharma and D.S. Hooda, "Generalized Measures of 'Useful' Relative Information and Inequalities" *Journal of Engineering, Management & Pharmaceutical Sciences*, Vol.1(1), pp.15-21, 2010.
183. D.S. Hooda and D.K. Sharma (2010) "Exponential Survival Entropies and Their Properties" *Advances in Mathematical Sciences and Applications*, Vol. 20, pp. 265-279, 2010.
184. D.S. Hooda and D.K. Sharma, "Generalized 'Useful' Information Generating Functions" *Journal of Appl. Math. and Informatics*, Vol. 27( 3-4), pp. 591-601, 2009.
185. Regin Rajan, "The Concept of the Cryptocurrency and the Downfall of the Banking Sector in Reflecting on the Financial Market", *Rentgenologiya i Radiologiya*, January 2021(60(S1)):17-33.
186. Regin Rajan, "An educational tool for enhanced mobile e-Learning for technical higher education using mobile devices for augmented reality", *Microprocessors and Microsystems*, January 2021, 83:10403

187. Pandya, S., Vyas, D. and Bhatt, D., A Survey on Various Machine Learning Techniquesl, *International Conference on Emerging trends in Scientific Research (ICETSR-2015)*, ISBN no: 978-81-92346-0-5, 2015.
188. Pandya, S., Wandra, K., Shah, J., A Hybrid Based Recommendation System to overcome the problem of sparcityl, *International Conference on emerging trends in scientific research*, December, 2015.
189. Mehta, P., Pandya, S., A review on sentiment analysis methodologies, practices and applications, *International Journal of Scientific and Technology Research*, 2020, 9(2), 601–609
190. F. Arslan, B. Singh, D.K. Sharma, R. Regin, R. Steffi and S. Suman Rajest, "Optimization Technique Approach to Resolve Food Sustainability Problems," *2021 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE)*, 2021, 25-30, doi: 10.1109/ICCIKE51210.2021.9410735.
191. G.A. Ogunmola, B. Singh, D.K. Sharma, R. Regin, S.S. Rajest and N. Singh, "Involvement of Distance Measure in Assessing and Resolving Efficiency Environmental Obstacles," *2021 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE)*, 2021, pp. 13-18, doi: 10.1109/ICCIKE51210.2021.9410765.
192. D.K. Sharma, B. Singh, M. Raja, R. Regin and S.S. Rajest, "An Efficient Python Approach for Simulation of Poisson Distribution," *2021 7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, 2021, 2011-2014, doi: 10.1109/ICACCS51430.2021.9441895.
193. D.K. Sharma, B. Singh, E. Herman, R. Regine, S.S. Rajest and V.P. Mishra, "Maximum Information Measure Policies in Reinforcement Learning with Deep Energy-Based Model," *2021 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE)*, 2021, pp. 19-24, doi: 10.1109/ICCIKE51210.2021.9410756.
194. D.S. Gupta and G.P. Biswas, "Design of lattice-based ELGamal encryption and signature schemes using SIS problem," *Trans. Emerg. Telecommun.Technol.*, 29(6), 2018, Art. no. e3255
195. D.S. Hooda and D.K. Sharma, "Non-additive Generalized Measures of 'Useful' Inaccuracy" *Journal of Rajasthan Academy of Physical Sciences*, Vol. 7(3), 359-368, 2008.
196. D.S. Hooda and D.K. Sharma, Generalized R-Norm information Measures-Journal of Appl. Math, *Statistics & informatics (JAMSI)*, Vol. 4 No.2, 153-168, 2008.
197. D.S. Gupta and G.P. Biswas, "A novel and efficient lattice-based authenticated key exchange protocol in C-K model," *Int. J. Commun. Syst.*, 31(3), 2018, Art. no. e3473.
198. Dilip Kumar Sharma, "*Some Generalized Information Measures: Their characterization and Applications*", Lambert Academic Publishing, Germany, 2010. ISBN: 978-3838386041.
199. Regin Rajan, Dr.T. Menakadevi, "Dynamic Clustering Mechanism to Avoid Congestion Control in Vehicular Ad Hoc Networks Based on Node Density", *Wireless Personal Communications*, August 2019, 107(1),DOI: 10.1007s11277-019-06366-2.



200. D.S. Gupta and G.P. Biswas, "On securing bi-and tri-partite session key agreement protocol using IBE framework," *Wireless Pers. Commun.*, vol. 96, no. 3, pp. 4505–4524, 2017.
201. Regin Rajan, Dr.T. Menakadevi, "A Novel Clustering Technique to Stop Congestion occur Vehicular Ad-hoc Networks using Node Density based on Received Signal Strength", *Peer-to-Peer Networking and Applications*, 2020, DOI:10.1007/s12083-020-00958-7
202. T. Chen, J. Blasco, J. Alzubi, and O. Alzubi "Intrusion Detection". *IET Publishing*, 1(1), 1-9, 2014.
203. Omar A. Alzubi, "A deep learning- based Frechet and Dirichlet model for intrusion detection in IWSN", *Journal of Intelligent & Fuzzy Systems*, 2021, 1-11. DOI: 10.3233/JIFS-189756
204. Omar A. Alzubi, Thomas M. Chen, Jafar A. Alzubi, Hasan Rashaideh, and Nijad Al-Najdawi, "Secure Channel Coding Schemes based on Algebraic-Geometric Codes over Hermitian Curves", *Journal of Universal Computer Science*, 22(4), 2016.
205. Jafar Alzubi, Ambeshwar Kumar, Omar Alzubi, and R. Manikandan, "Efficient Approaches for Prediction of Brain Tumor using Machine Learning Techniques" *Indian Journal of Public Health Research and Development*, Vol. 10, No. 2, 2019
206. Omar A. Alzubi, "An Empirical Study of Irregular AG Block Turbo Codes over Fading Channels", *Research Journal of Applied science, Engineering, and Technology*, 11(12), 1329-1335, 2015
207. Jafar A. Alzubi, R. Manikandan, Omar A. Alzubi, N. Gayathri, and Rizwan Patan, "A Survey of Specific IoT Applications" *International Journal on Emerging Technologies*, Vol. 10, No. 1, pp. 47-53, 2019
208. Sholiyi A., O'Farrell T., Alzubi O., and Alzubi J., "Performance Evaluation of Turbo Codes in High Speed Downlink Packet Access Using EXIT Charts", *International Journal of Future Generation Communication and Networking*, Vol. 10, No. 8, August 2017.
209. Sadegh Samadi, Mohammad Reza Khosravi, Jafar A. Alzubi, Omar A. Alzubi, and Varun Menon, "Optimum Range of Angle Tracking radars: A Theoretical Computing" *International Journal of Electrical and Computer engineering*, Vol. 9, No. 3, 2019.
210. Jafar A. Alzubi, Omar A. Alzubi, G. Suseendran, and D. Akila, "+ A Novel Chaotic Map Encryption Methodology for Image Cryptography and Secret Communication with Steganography" *International Journal of Recent Technology and Engineering*, 8(IC2), May 2019.
211. Jafar Alzubi, J. Selvakumar, Omar Alzubi, and R. Manikandan, "Decentralized Internet of Things" *Indian Journal of Public Health Research and Development*, 10(2), 2019
212. Albalawi, H. Zhu, S. Taccheo, A. Chiasera, M. Ferrari, J. Alzubi, and O. Alzubi, "Numerical modeling of the impact of pump wavelength on Yb-doped fiber amplifier performance" *Optical and Quantum Electronics*, 48: 500, 2016.
213. Alrabea, A., Alzubi, O., Alzubi, J., "An Enhanced Mac Protocol Design Prolong Sensor Network Lifetime", *International Journal on Communications Antenna and Propagation (IRECAP)*, 10(1), 2020, 37-43.
214. <https://doi.org/10.15866/irecap.v10i1.17467>

215. Jafar A. Alzubi, Rachna Jain, Omar A. Alzubi, Anuj Thareja, Yash Upadhyay, "Distracted driver detection using compressed energy efficient convolutional neural network" *Journal of Intelligent and Fuzzy systems*, 2021. DOI: 10.3233/JIFS-189786
216. Sajid Nazir , Hassan Hamdoun, Jafar A. Alzubi, Omar A. Alzubi, "Cyber Attack Challenges and Resilience for Smart Grids", *European Journal of Scientific Research*, 134(1), 111-120, 2015
217. Jafar A. Alzubi "Diversity Based Improved Bagging Algorithm" *In Proceedings of the International Conference on Engineering & MIS 2015 (ICEMIS '15)*. Istanbul - Turkey.
218. Jafar A. Alzubi, "Diversity-Based Boosting Algorithm". *International Journal of Advanced Computer Science and Applications*, Vol. 7, No. 5, 2016.
219. Jafar. A. Alzubi, "Blockchain-based Lamport Merkle Digital Signature: Authentication tool in IoT healthcare" *Computer Communications*, Vol. 170, pp 200-208, 2021.
220. Mehdi Gheisari, Hamid Esmaeili Najafabadi, Jafar A. Alzubi, Jiechao Gao, Guojun Wang, Aaqif Afzaal Abbasi, Aniello Castiglione, "OBPP: An ontology-based framework for privacy-preserving in IoT-based smart city" *Future Generation Computer Systems*, 2021. DOI: <https://doi.org/10.1016/j.future.2021.01.028>
221. Tusharkant Panda, K.C. Patra, Jafar A. Alzubi, N.K. Barpanda, G. Palai, "Analytical studies on FBG based SOI structure for realization of optical interconnect" *Optik – International Journal of Light and Electron Optics*, Vol. 193, 2019, <https://doi.org/10.1016/j.ijleo.2019.162979>intelligent
222. J. Alzubi, O. Almomani, O. Alzubi, and M. Al-Shugran "Intelligent and Dynamic Neighbourhood Entry Lifetime for Position-based Routing Protocol Using Fuzzy Logic Controller". *International Journal of Computer Science and Information Security*, Vol. 14, No. 1, 2015.
223. D.S. Gupta and G.P. Biswas, An ECC-based authenticated group key exchange protocol in IBE framework, *International Journal of Communication Systems*, 30(18), e3363, 2017.