1. **Resource Allocation for Efficient IOT Application in Fog Computing**

Details : When we come across problems in creating IOT architecture the major problem that arises is automatic stipulation of resources. At the same time in today’s era it’s very important to integrate this problem with better Quality of Services (QoS) because of which the cloud computing is taking a shift. As we are well acquainted that in fog computing networks bandwidth is limited therefore it becomes quite important to build a joint architecture with resource allocation problem giving it a better quality of services with enhanced efficiency and low latency communication. Priority of QoS is determined by Systematic Ladder Process (SLP) and decision parameter evaluation by RECK algorithm. In this paper we will design a better framework for IOT resource Allocation Scheme with better efficiency and better QoS. The paper too highlights the comparison of the previous works of the resource allocation algorithms and schemes with RECK algorithm.

**Keywords-** IOT, QoS, Decision parameters, RECK algorithm.

1. **IOT Forensics: Challenges, Interrogation & Methodology**

Details : The walls of this paper lie upon two strong building Components in context of IOT forensics – The first lays stress upon XYZ Region Model that might be co-relating the Digital Forensics. The second finds the best suitable Concept that might be integrated in the use with XYZ model. The above two components play a vital role in the identification, collection of clues or the evidences of suspects in security attacks and the storage of these evidences . IOT forensics is too a science that involves the systematic knowledge gained by human being through experimentation, Observation, Processing of the facts and coming to a effective conclusion. The paper too gives a brief distinction of IOT Forensics (IOTF) with Digital Forensics (DF). These two components enhance the efficiency of the security models and maximizing the of the given time and assure us the perfect evidence recognition and data extraction. These concepts can be interlinked with many frameworks , models .

**Keywords** : Internet Of things (IOT) ;Digital Forensics; Security ;Model

1. **Multiplicity in the parameter lists resulting in Online Computation of IOT Models using αβ Algorithm and its improved efficiency by Population Depending stochastic (PDS) Algorithm by variation in Velocity constraint of entities around parameters.**

Details : Keeping in mind the aspect of IOT in which we had long computations of online parameter lists and outcome that came out from IOT devices, this paper is written to design a scheme in which there is multiplicity in the parameter lists based on αβ algorithm. The processing of parameters, Collection of parameters, processing of parameters and displaying it done by the layer which senses it with the help of Transmitting network layer in combination with application layer. αβ neural network algorithm is integrated with the application layer in order to provide the optimisation of real parameters and to reduce the computations of parameters and provide enhanced accurate estimation and prediction. The theme is completely based on gathering environment related data. This algorithm using 3 layers has a unique property for providing the estimation and approximation of the non linear curves and can predict the best temperature pattern, the experimental results too believe in the same. There is an online simulation of this computation scheme based on the same algorithm and to enhance the speed of data gathering per unit time, prediction of environment data and alarming us the warning to hazards. As the improvement is the part of technology development in the same way we have shown the improvement in αβ algorithm by the use of Population Depending stochastic Algorithm being in the domain of artificial intelligence. Being an evolutionary computation the variation in the velocity of entities around these parameters by several methods results in enhancement of the efficiency of the current algorithm.

**Keywords**: Parameter, αβ algorithm, PDS algorithm, artificial intelligence, evolutionary

**4.Human Recognition Subjected to Eye Movement Biometrics and Proposal Of Hybrid Algorithm depending upon Heterogenous Information Sources For Eye Movement based Human Identification.**

Details : This paper presents a research for the use of multi-source information fusion in the field of eye movement biometrics. In the current state-of-the-art, there are different techniques developed to extract the physical and the behavioural biometric characteristics of the eye movements. In this work, we explore the effects from the multi-source fusion of the heterogeneous information extracted by different biometric algorithms under the presence of diverse visual stimuli. We propose a two-stage fusion approach with the employment of stimulus-specific and algorithm-specific weights for fusing the information from different matchers based on their identification efficacy. The experimental evaluation performed on a large database of 320 subjects reveals a considerable improvement in biometric recognition accuracy, with minimal equal error rate (EER) of 5.8%, and best case Rank-1 identification rate (Rank-1 IR) of 88.6%. It should be also emphasized that although the concept of multi-stimulus fusion is currently evaluated specifically for the eye movement biometrics, it can be adopted by other biometric modalities too, in cases when an exogenous stimulus affects the extraction of the biometric features.

The contribution of the current research in the field of eye movement biometrics can be summarized as follows:

1) We introduce the concept of heterogenous sourced information fused algorithm, i.e. fusion of different instances of the same modality (eye movements) under the influence of different visual stimuli.

2) We propose a step by step weighted fusion scheme for the efficient combination of the comparison scores generated by the different eye movement algorithms (hybrid-algorithmic fusion) under the influence of diverse visual stimuli. Also, we suggest a weight-training method for the calculation of the fusion weights.

3) We fuse the 4 eye movement algorithms : OPC , CEM-B, FDM , WAVELET which are suitable for multi stimulus.

**Keywords**: eye movement biometrics, multi-stimulus fusion, multi-algorithmic fusion

1. **Ear based Human Identification Using Geographical phenomenon ”Contour ” and its Hybrid with Eye Movement human identification useful for Securing Our banking Sectors Using Selfii Payment Application**

Details : **:**  The project dealt of the creation of payment application that uses your real time selfii and thereby uses the current technology of CONTOUR and fuses with previous project resulting in a enhanced security model for banking sectors and an advanced , attractive way for audience to use internet banking, online resources and banks. Concept is fused with Machine learning , Artificial Intelligence , Ear and Eye Biometrics. Software specifications and its implementation would be a research based.