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Enhancing Network Security and Performance Using Optimized ACLS

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ABSTRACT
Access Control list plays a very important role in network security. Proper combination of rules for ACLs anclose loop holes inthe system, this minimizing securitybreaches. An ACL can improvise networkerformance upto agood levelby limiting the traffic controls the areas that can be accessible to any device or user. However, if ACL is not managed properly and efficiently it causes packet latency and egrades the network performance. In this paper we present variousoptimization mechanismsto achieve noptimalACLwhichreducesthe Packet latency. We also proposed an efficient optimization algorithmto ptimize the ACL to enhance network performance. Walso discuss the importance of ACL and the various ruleanomalies.

Keywords
Network,Security,ACL.Anomalies,NetworkAccessControl,Optimization,Router,latency, Rule.

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ComparativeStudyofDifferentAlgorithmstoSolveNQueens Problem

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ABSTRACT
This Paper provides a brief description of the Genetic Algorithm (GA), the Simulated Annealing (SA) Algorithm, the Backtracking (BT) Algorithm and the Brute Force (BF) Search Algorithm and attempts to explain the way as how the Proposed Genetic Algorithm (GA), the Proposed Simulated Annealing (SA) Algorithm using GA, the Backtracking (BT) Algorithm and the Brute Force (BF) Search Algorithm can be employed in finding the best solution of N Queens Problem and also, makes a comparison between these four algorithms.It is entirely a review based work. The four algorithms were written as well as implemented. From the Results, it was found that, the Proposed Genetic Algorithm (GA) performed better than the Proposed Simulated Annealing (SA) Algorithm using GA, the Backtracking (BT) Algorithm and the Brute Force (BF) Search Algorithm and it also provided better fitnessvalue (solution) than the Proposed Simulated Annealing Algorithm (SA) using GA, the Backtracking (BT) Algorithm and the Brute Force (BF) Search Algorithm, for different N values. Also, it was noticed that, the Proposed GA took more time to provide result than the Proposed SA using GA.

KEYWORDS
TractableandIntractableProblems,NQueensProblem,GeneticAlgorithm,Simulated Annealing Algorithm,BacktrackingAlgorithm,BruteForceSearchAlgorithm, Fitness,No.ofSolutions, Time.

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CurrentPerspectiveinTaskSchedulingTechniquesinCloud Computing: A Review

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ABSTRACT
Cloud computing isa development ofparallel, distributed and grid computing whichprovides computing potential as a service to clients rather than a product. Clients can access software resources, valuable information and hardware devices as a subscribed and monitored service over a network through cloud computing.Due to large number of requests for access to resources and service level agreements between cloud service providers and clients, few burning issues in cloud environment like QoS, Power, Privacy and Security, VM Migration, Resource Allocation and Scheduling need attention of research community.Resource allocation among multiple clients has to be ensured as per service level agreements. Several techniques have been invented and tested by research community for generation of optimal schedules in cloud computing. A few promising approaches like Metaheuristics, Greedy, Heuristic technique and Genetic are applied for task scheduling in several parallel and distributed systems. This paper presents a review on scheduling proposals in cloud environment.

KEYWORDS
Metaheuristics,Heuristics,Greedy,GeneticAlgorithms,Review,TaskScheduling. Full

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TrackingNumberPlateFromVehicleUsingMATLAB

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ABSTRACT
In Traffic surveillance, Tracking of the number plate from the vehicle is an important task, which demands intelligent solution. In this document, extraction and Recognization ofnumber plate from vehicles image has been done using Matlab. It is assumed that images of the vehicle have been captured from Digital Camera. Alphanumeric Characters on plate has been Extracted and recognized using template images of alphanumeric characters. This paper presents a new algorithm in MATLAB which has been used to extract the number plate from the vehicle in various luminance conditions. Extracted image ofthe number plate can be seen in a text file for verification purpose. Number plate identification is helpful in finding stolen cars, car parking management system and identification of vehicle in traffic.

KEYWORDS
NumberplateExtraction,MATLAB,Recognization,DigitalCamera,luminancecondition Full

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AnalysisofSoftwareCostEstimationUsingFuzzyLogic

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ABSTRACT
The growing application of software and resource constraints in software projects development needa moreaccurateestimateofthecostandeffort becauseofthe importance in programplanning, coordinated scheduling and resource management including the number of programming's and software designusing tools and modern methods ofmodeling. Effectively control of investment for software development is achieved by accurate cost estimation.The accurate Software Cost Estimation (SCE) is very difficult in the early stages of software development because many of input parameters that are effective in software's effort are very vague and uncertain in the early stages. SCE that is the basis of software projectsdevelopment planning isconsideredtobeofhighaccuracy, because iftheestimate is lessthan actualvalues, confidence factorisreduceand this is meansthepossibilityoffailure inproject. Conversely, ifthe project isestimated at morethanthe actualvalue it would be the conceptof unhelpful investment and waste of resources. In the evaluation of software projects is commonly used deterministic method. But software world is totally different from the linear variables and nowadays for performance and estimation should be used nonlinear and non- probabilistic methods. Inthispaper, wehave studiedtheSCE UsingFuzzyLogic(FL) andwe have compared it with COCOMO model. Results of investigations show that FL is a performance model for SCE.

KEYWORDS
SoftwareCostEstimation,COCOMO,FuzzyLogic

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DistributionofMaximalCliqueSizeUndertheWatts-Strogatz Model of Evolution of Complex Networks

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ABSTRACT
In this paper, we analyze the evolution of a small-world network and its subsequent transformation to a random network using the idea of link rewiring under the well-known Watts-Strogatz model for complex networks. Every link u-v in the regular network is considered for rewiring with a certain probability and if chosen for rewiring, the link u-v is removed from the network and the node u is connected to a randomly chosen node w (other than nodes u and v). Our objective in this paper is to analyze the distribution of the maximal clique size per node by varying the probability of link rewiring and the degree per node (number of links incident on a node) in the initial regular network. For a given probability of rewiring and initial number of links per node, we observe the distribution of the maximal clique per node to follow a Poissondistribution. We also observe the maximalclique size per node in the small world networkto be veryclose to that ofthe average value and close to that of the maximal clique size in a regular network. There is no appreciable decrease in the maximalcliquesizeper nodewhenthe networktransforms fromaregular networkto asmall- world network. Onthe other hand, when the network transforms from a small-world network to a random network, the average maximal clique size value decreases significantly.

KEYWORDS
MaximalCliqueSize,Small-WorldNetworks,ComplexNetworks,RandomNetworks,Link Rewiring, Poisson Distribution, Network Evolution, Watts-Strogatz Model.

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AComparativeAnalysisonSoftwareArchitectureStyles

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ABSTRACT
Software architecture is the structural solution that achieves the overall technical and operational requirements for software developments. Software engineers applied software architectures for their software system developments; however, they worry the basic benchmarks in order to select software architecture styles, possible components, integration methods (connectors) and the exact application of each style. The objective of this research work was a comparative analysis of software architecture styles by its weakness and benefits in order to select by the programmer during their design time. Finally, in this study, the researcher has been identified architectural styles, weakness, and Strength and application areas with its component, connector and Interface for the selected architectural styles.

KEYWORDS
ArchitectureStyles,Components,Connectors,Interface

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Real-TimeEventual Consistency

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ABSTRACT
Many real-time systems are naturally distributed and these distributed systems require notonly highavailability but also timely execution of transactions. Consequently, eventual consistency, a weaker type of strong consistency is an attractive choice for a consistencylevel. Unfortunately, standard eventual consistency, does not contain any real-time considerations. Inthispaper we haveextended eventualconsistencywithreal-time constraints and this we call real-time eventual consistency. Followed by this new definition we have proposed a method that follows this new definition. We present a new algorithm using revision diagrams and fork-join data in a real-time distributed environment and we show that the proposed method solves the problem.

KEYWORDS
Real-timedatabases, eventualconsistency,transactionprocessing

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DNADataCompressionAlgorithmsBasedon Redundancy

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ABSTRACT
CarlJung said, 'Collective unconscious' i.e. we areallconnectedto eachother insome wayor theother viaour DNA. Infrequent casestherearefour bases inaDNA. Theyarea(Adenine), c (Cytosine), g(Guanine) andt (Thymine). Eachofthese bases canbe represented bytwo bits as 2 powers 2 =4 i.e. a – 00, c – 01, g – 11 and t – 10 respectively, although this choice is random. So redundancywithina sequence is more likelyto exist. That's why inthis paper we have explored different types of repeat to compress DNA. These are direct repeats,palindrome or reverse direct repeat, inverted exact repeats or complementary palindrome or exact reverse complement, inverted approximate repeats or approximate complementary palindrome or approximate reverse complement, interspersed or dispersed repeats, flanking repeats or terminal repeats etc. Better compression gives better network speed and save storage space.

KEYWORDS
Directrepeats,Invertedrepeats,Complementarypalindrome,Interspersedrepeatsand Flanking repeats.

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AFaceRecognitionUsingLinear-DiagonalBinary Graph Pattern Feature Extraction Method

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ABSTRACT
Face recognition is one the most interesting topic in the field in computer vision and image processing. Face recognition is a processing system that recognizes and identifies individuals human by their faces. Automatic face recognition is powerful way to provide, authorized access to control their system. Face recognition has many challenging problems (like face pose, face expression variation, illumination variation, face orientation and noise) in the field of image analysis and computer vision. This method is workonfeature extractionpart offace recognition. New way to extract face feature using LD-BGP code operator it is like LGS and LBP feature extraction operator. In our LD-BGP-code operator work in two direction first linear then diagonal. In both direction, its create eight digits code to every pixel of image. Means of these two directional are taken so that is cover all neighbor of center pixel. First linear direction, only horizontal and vertical pixel are taken. Second diagonal direction only diagonal pixels taken. In matching phase, we use Euclidean distance to match a face image. We perform the Linear and diagonal directional operator method on face database ORL. We get accuracy 95.3 %. LD-BGP method also works on different type image like illuminatedand expression variation image.

KEYWORDS
facerecognition,text based localdescriptor,biometric,patternrecognitionandLD-BGP Full

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