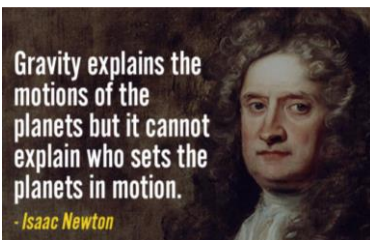


BGIET

Department of IT Newsletter

VISION

To be a center of excellence in technical education, research and support services to produce comprehensively trained, innovative Computer Science Engineers of highest quality to contribute to the Nation's development.



Mission

M1. Create an environment of skill learning through faculty training, online learning, sound academic practices and research endeavors

M2. Provide opportunities to promote organizational and leadership skills in students through various extra-curricular and co-curricular events.

M3. To uplift innovative research in Computer Science and Engineering to serve the needs of industry, Government and society.

M4. Providing social awareness and responsibility in students to serve the Nation and to protect environment.

“Success can come to you by courageous devotion to the task lying in front of you.”

DEPARTMENT OF IT

News Letter

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News Letter

FROM THE HOD'S DESK



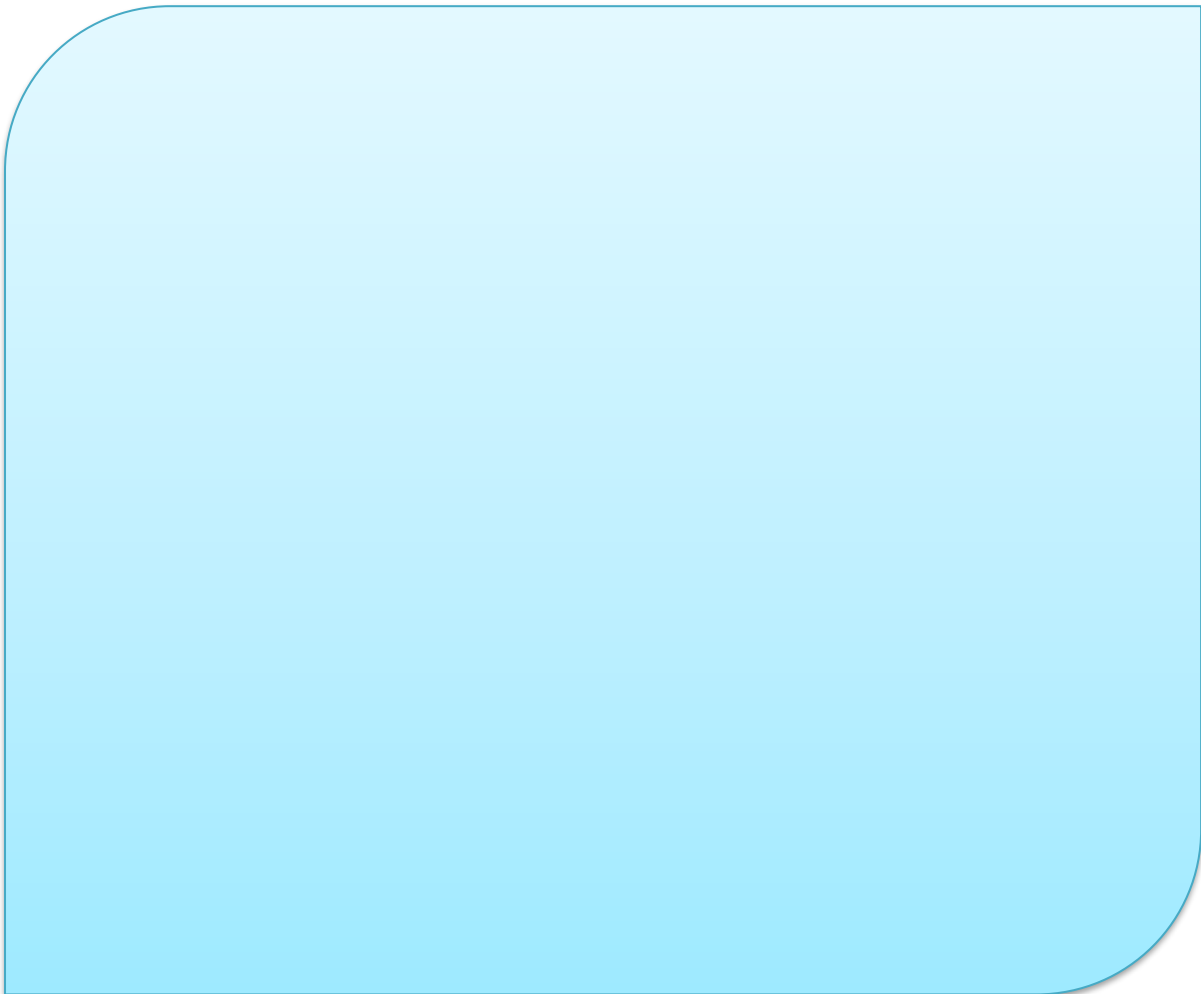
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News Letter

FROM THE EDITORS'S DESK



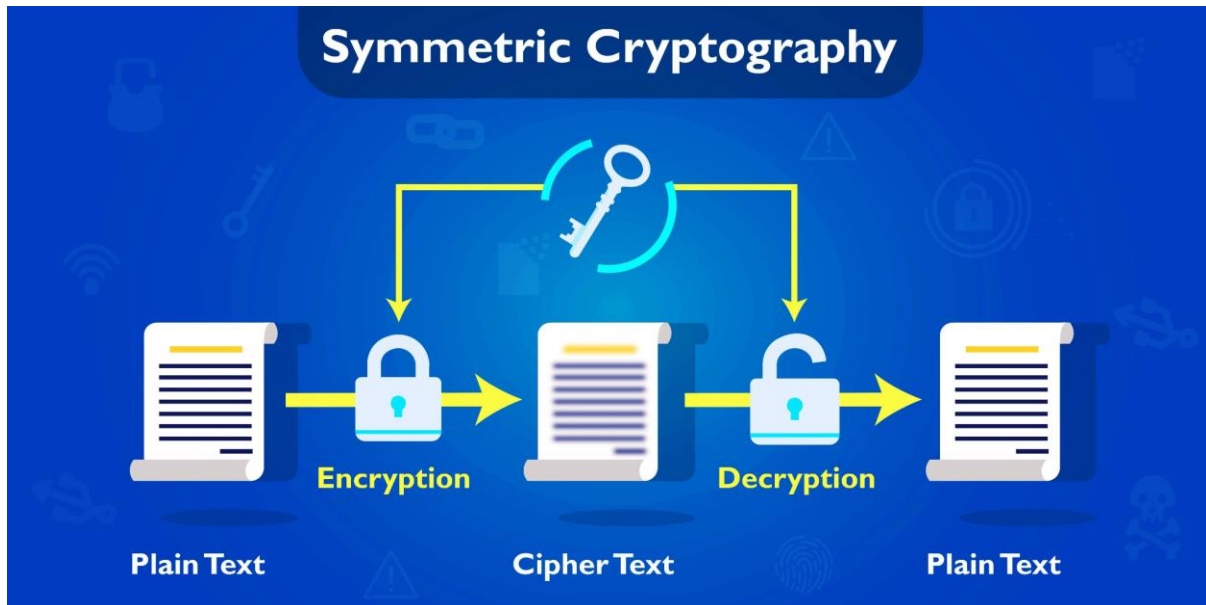
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News Letter

Quantum Cryptography

05/03/2019

Workshop By - ARN Infotel



Quantum cryptography is the science of exploiting quantum mechanical properties to perform cryptographic tasks.[1][2] The best-known example of quantum cryptography is a quantum key distribution which offers an information-theoretically secure solution to the key exchange problem. The advantage of quantum cryptography lies in the fact that it allows the completion of various cryptographic tasks that are proven or conjectured to be impossible using only classical (i.e. non-quantum) communication. For example, it is impossible to copy data encoded in a quantum state. If one attempts to read the encoded data, the quantum state will be changed due to wave function collapse (no-cloning theorem). This could be used to detect eavesdropping in quantum key distribution (QKD).

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News Letter



7th International Conference on Advancements was held on 15th and 16th March in 2019 at Campus. The conference would offer a large number of invited lectures from renowned speakers all over the country. The Best paper awards will be given for the papers judged to make the most significant contribution to the conference.

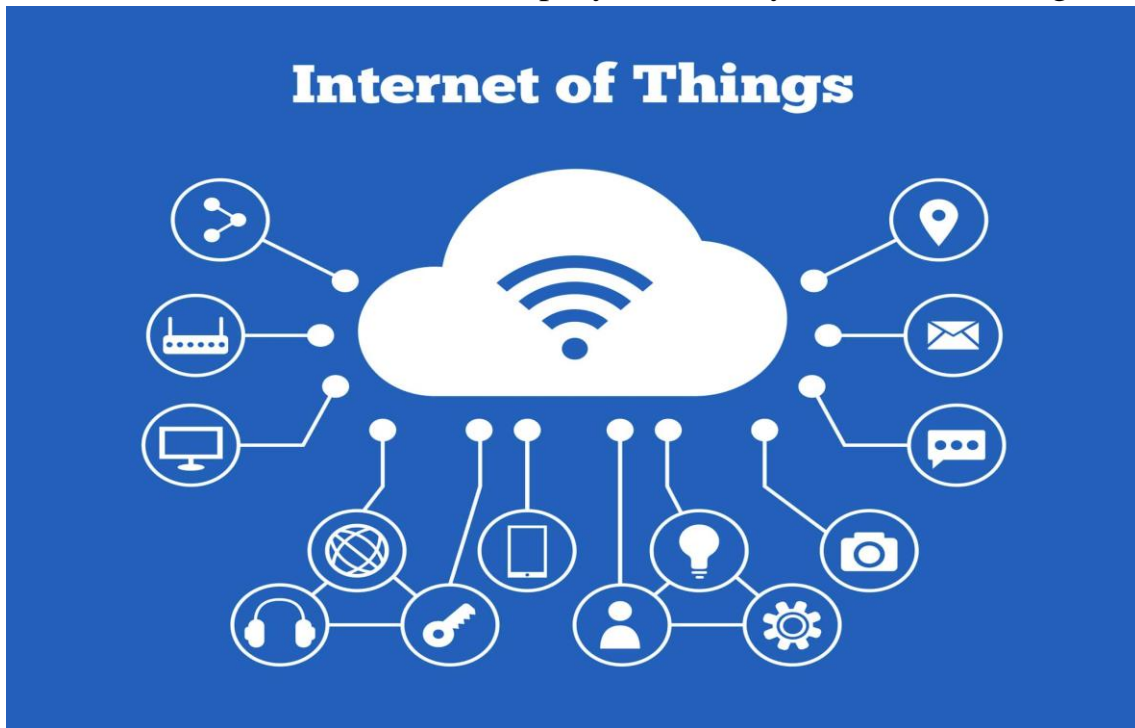
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News Letter

Internet of Things

18/03/2019

Workshop By - Mr Vinay Pathak, Smart edge India



The Internet of things describes physical objects with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks. The Internet of things has been considered a misnomer because devices do not need to be connected to the public internet, they only need to be connected to a network and be individually addressable. The field has evolved due to the convergence of multiple technologies, including ubiquitous computing, commodity sensors, increasingly powerful embedded systems, and machine learning.

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News Letter

Fusion of AI and IoT

28/03/2019

Technical Talk By - Dr Anju (Associate Professor)



A Fusion of Artificial Intelligence and Internet of Things for Emerging Cyber Systems. Covers innovative research-oriented ideas, implementation experiences, and socio-economic perspectives pertaining to AI and IoT. Focuses on AI and IoT research in the field of sustainable socio-economic development and improving life quality.

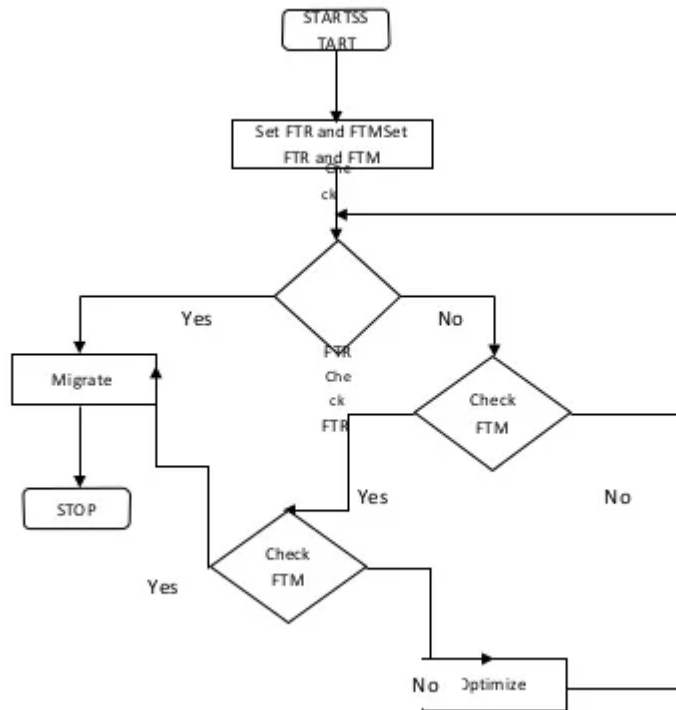
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News Letter

Software Rejuvenation

28/03/2019

Technical Talk By - Dr Munish Jindal



In software engineering, software rejuvenation is an approach to help prevent performance degradation and other associated failures related to software ageing. This proactive technique was identified as a cost-effective solution during research at the AT&T Bell Laboratories on fault-tolerant software in the 1990s.

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News Letter

Pervasive Networking Technology

01/04/2019

Guest lecture By - Dr Mahanbir Singh (Associate Professor)

Ubiquitous Systems



A pervasive network is a large scale network that appears to operate almost everywhere using a large number of networks that self-organize to offer unified services. The following are illustrative examples. This is a potential alternative to the broadband cellular network technology currently used by most mobile devices.

Wifi

Celular network

Internet of Things

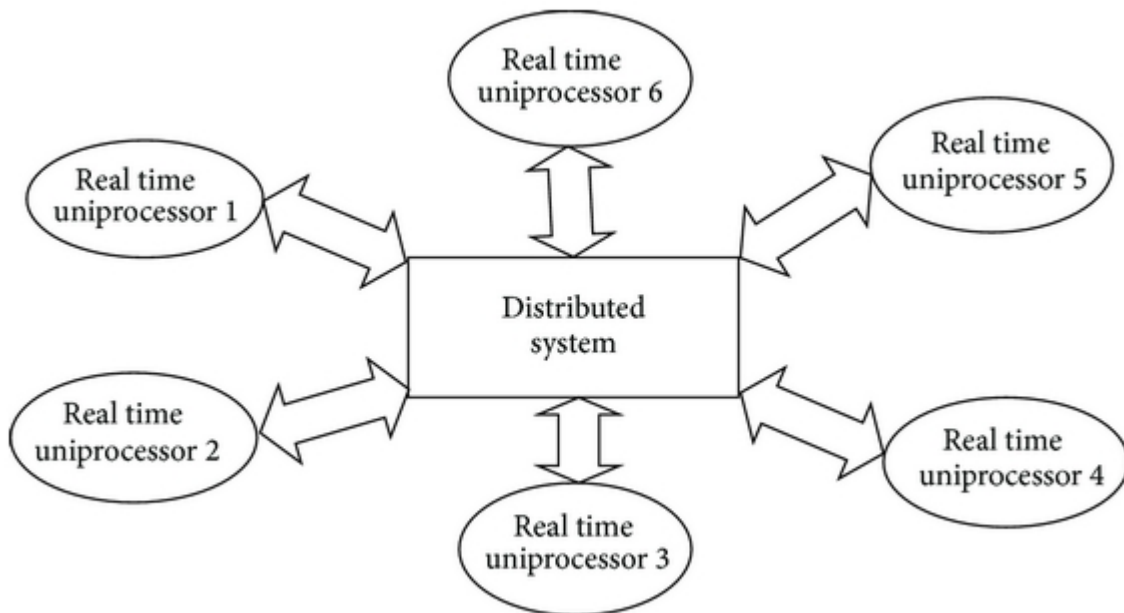
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News Letter

Real-time Scheduling : RM and EDF

03/04/2019

Workshop By - Artech Infosystem Pvt Ltd.



A real-time system is one whose correctness depends on timing as well as functionality.

When we discussed more traditional scheduling algorithms, the metrics we looked at were turn-around time (or throughput), fairness, and mean response time. But real-time systems have very different requirements, characterized by different metrics:

Timeliness: how closely does it meet its timing requirements (e.g. ms/day of accumulated tardiness)

Predictability: how much deviation is therein delivered timeliness

DEPARTMENT OF IT

News Letter



SachTech Solutions visit in campus for placement drive. SachTech Solution established back in 29 December, 2011 at Mohali, India to serve the varying need of individuals as well as SMEs in today's competitive market across the globe. 13 students were selected during this placement drive.

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News Letter

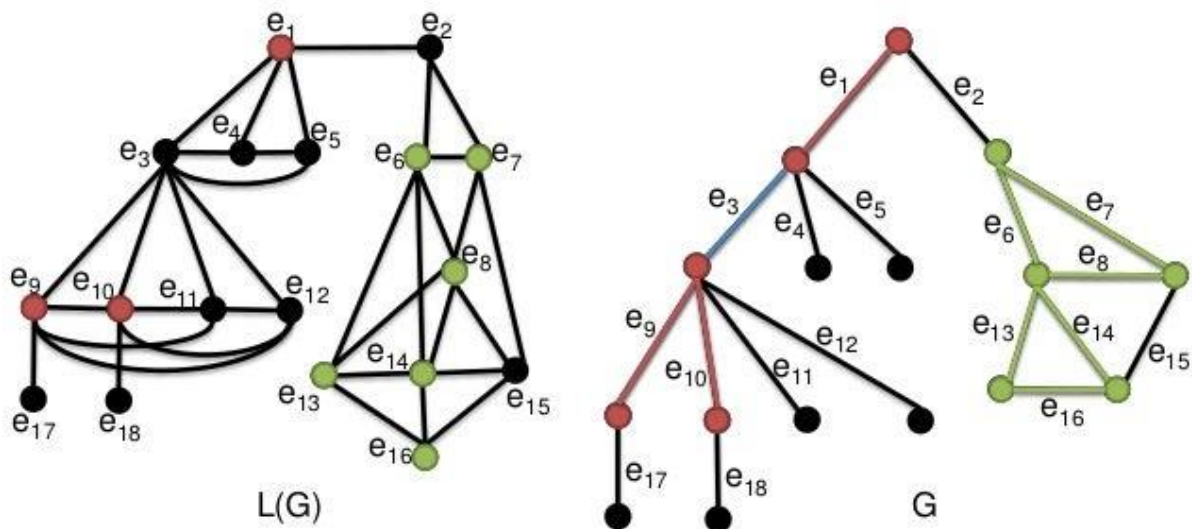
Approximation Algorithms

18/04/2019

Guest Lecture By - Bhilwara Info technology ltd

The 3-approximation algorithm

- Step 3: compute a maximum matching in $G[S']$, and extend this edge subset in G in a greedy fashion until the subset spans all the vertices in S' .



An approximation algorithm is a way of dealing with NP-completeness for an optimization problem. This technique does not guarantee the best solution. The goal of the approximation algorithm is to come close as much as possible to the optimal solution in polynomial time. Such algorithms are called approximation algorithms or heuristic algorithms.