Advisory Committee Meeting

The 25th Advisory Committee meeting was held in K. K. Wagh Institute of Engineering Education & Research, Nashik on 14th June 2014. Chairman Vivek Sawant and other Advisory Committee members were felicitated by Hon. Shri. Balasaheb Wagh, President, K. K. Wagh Education Society. Hon. Shri. Balasaheb D. Wagh also welcomed and felicitated the newly inducted Advisory Committee member Dr. V. V. Mahajani. Advisory Committee members Dr. D. G. Hapasee, Dr. D. M. More and Dr. V. V. Mahajani were present for the meeting. Shri. Kashinath Tarle, Vice President, K. K. Wagh Education Society, Trustee Shri. Sameer Wagh, Secretary Prof. K. S. Bandi and Principal Dr. K. N. Nandurkar were present. All Professors, Associate Professors, all HODs of the Institute, Principals and HODs of Polytechnic Institutes and Agriculture allied colleges attended the meeting.

Inauguration of MCA-PGCON 2014

Department of MCA has organized National level conference “MCA-PGCON-2014” on 13th June 2014. The chair person was Dr. Sanjaykumar Jain, Director of Januware Consultancy Services and Ex-coordinator of YCMOU. The conference was inaugurated by Principal Dr. K. N. Nandurkar followed by keynote address by chair person Dr. Sanjaykumar Jain. The conference aimed at showcase of the dissertation work carried out by the PG students of MCA with the projects, undertaken in various colleges. It provided a platform for MCA students to present and discuss conceptual and experimental work. MCA-PGCON-2014 helped in inculcating research culture among MCA students and to exchange and share technological advances, new research findings and motivate students to do the quality research work. Total 36 participants have been participated from different colleges. Cash prizes were awarded for best three papers.
Presentations were done by Principal Dr. K. N. Nandurkar and Prof. D. M. Chandwadkar about the Institute and admission process for Engineering Admissions through Centralized Admission Process-2014. It was attended by large number of students and parents from Nashik City.

- **Expert Lecture/Seminar/Courses/Worshop Organized:**
  - Department of Computer Engineering organized an expert lecture on ‘SWOT Analysis’ by Mr. Shirirang Kogekar on 27th June 2014 and expert lecture on ‘BE Project Guidance’ by Ms. Anuja Kulkarni on 28th June 2014. ELC and Techrel sessions were also conducted for BE Computer Engineering Students on 25th and 27th June 2014 respectively.
  - Department of E & TC organized an expert lecture on ‘Need of Electronics in Industries’ by Mr. Sanjay Chaudhari, Director, Electronics Study Centre, Jalgaon. Same department also conducted workshop on ‘Basics of Android Programming’.
  - Department of Electrical Engineering organized an expert talk on ‘Project Guidance’ by Mr. John Yesuraj, GM, Crompton Greaves, Nashik on 28th June 2014. Same department also organized an expert talk on ‘Career Guidance’ by Prof. Dr. B. E. Kushare, Head, Electrical Engg. Dept.
  - The Department of Information Technology has organized 10 days training on “Development of Aptitude and Soft Skills” by TechRel Technologies Pvt., Ltd., Pune. 68 final year IT students participated in the workshop. The first phase of this training was conducted during 26th to 30th June, 2014. Mr. Kartik conducted the first session on Aptitude skills and Ms. Anjali Atre trained the students for Language skills.
  - MCA Department organized an Expert Lecture on “Industrial Challenges and C++” by Mr. Vijaymani Gulati from Persistent Systems Ltd., Pune on 28th June 2014.

- **Seminar / Workshop / Training Attended By Staff:**
  - Principal Dr. K. N. Nandurkar and Prof. P. K. Shahabadkar attended the 3rd Nashik Zonal Council meeting of CII at NIWEC, Nashik on 11th June 2014.
  - E & TC Departmental staff Prof. S. C. Shinde, Prof. S. V. Shelke, Prof. K. P. Shinde, Prof. S. S. Ansari, Prof. K. S. Navale, Prof. A. P. Kaur, Prof. S. S. Dongare, Prof. P. P. Patil, Prof. A. Dangare, Prof. Swati Zambre and Prof. Parag Monde attended orientation workshop at Pune during 12-14 June 2014.
• Computer department staff Prof. N. S. Sonawane, Prof. S. M. Malao, Prof. S. S. Bhandare, Prof. J. R. Mankar, Prof. R. H. Jadhav, Prof. A. V. Taware, Prof. J. N. Thakur, Prof. Umesh Gaikwad of IT Department and Prof. R. A. Gangurde of MCA Department attended one week online workshop on “Computer networking “ from 16th to 21st June, 2014 organized by Indian Institute of Technology, Bombay at Department of Computer Engineering, KKWIEER, Nashik.

• Prof. Dr. V. S. Mane, Head of Chemical Engineering department and Prof. G. B. Daware attended the one day seminar “Analytical instruments and food safety”, organized by Agilent Technologies at Hotel Express Inn, Nashik on 25th June 2014.

- Declaration of FE Results
The first year Results were declared online by University of Pune for FE (2012) course on 28th June 2014. Summary is as follows:-

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Students appeared</th>
<th>Passed in all Subjects</th>
<th>Passed with ATKT</th>
<th>Total Students Pass</th>
<th>Percentage Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>602</td>
<td>485</td>
<td>203</td>
<td>688</td>
<td>85.78</td>
</tr>
<tr>
<td>2013-14</td>
<td>654</td>
<td>519</td>
<td>221</td>
<td>740</td>
<td>86.65</td>
</tr>
</tbody>
</table>

- NSS Activities
  • During 8th to 17th June 2014, our students Mr. Shivam Pathade and Kishor Choudhari participated in ‘Avhan 2014: Chancellor’s Brigade’ organized by Rashtrasant Tukoji Maharaj Nagpur University, Nagpur.
  • On 27th June 2014, four NSS volunteers (Ms. Ahire Sayali, Ms. Vanjari Anuja, Ms. Patil Vrushali and Ms. Patil Rina) actively participated in The Round Table Conference on Environment Awareness’ organized by Matoshri College of Engineering and Research Centre, Eksahre, Nashik.

- Papers presented by Students:
In month of June 2014, 09 Students of our Institute participated in various paper presentations. Out of which
  • Ms. Mamta S. Patel of MCA Department secured 1st Prize in paper presentation competition entitled ‘Missed2 Suite’ at “MCA-PGCON-2014” on 13th June 2014 organized at KKWIEER, Nashik.

- Industrial Visits Organized For Students:

<table>
<thead>
<tr>
<th>Date</th>
<th>Class</th>
<th>Name of Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/06/2014</td>
<td>T. E. Electrical</td>
<td>11 KV Substation Visit, K. K. Wagh Engineering College Campus</td>
</tr>
</tbody>
</table>

- Training & Placement:

<table>
<thead>
<tr>
<th>Name of the Dept.</th>
<th>Name of Company</th>
<th>No. of students selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCA</td>
<td>KPT, Pune</td>
<td>01</td>
</tr>
</tbody>
</table>

- CONGRATULATIONS
Prof. D. M. Chandwadkar, Head of E & TC department awarded Ph.D. from Pune University. His topic was “Identification of musical instruments and “Swar/Raga” in Hindustani classical music using signal processing techniques” under the guidance of Dr. M. S. Sutaone.

- Other Achievements
  • Principal Dr. K. N. Nandurkar was invited as Chief Guest for inauguration of CBSE pattern schools started by K. K. Wagh Education Society, at DGP Nagar and Saraswati Nagar Campus, Nashik on 2nd June 2014. He was also invited as guest of Honor for Prize Distribution of Football Tournament organized by Dechelon Sports on the College ground on 7th June 2014.
  • Prof. Dr. B. E. Kushare, Head, Electrical Engg. Dept. offered Electrical consultancy services to Energy Audit at Bosch India Ltd., at Nashik and Energy Audit at Technova Imaging. He also offered Electrical consultancy services to Electrical Design Substation MMDC Nashik, Accommodation Block Electrical Design MMDC Nashik and Electrical Design in Bosch Nashik.
  • To track the performance of interns, Prof. V. C. Bagal, Prof. A. L. Rane, Prof. M. E. Maniayar, Prof. M. R. Sonar and Prof. P. G. Bagale have visited to Corebiz Technology, Nashik during 16-18th June 2014.

- Abstracts of papers presented during June 2014: Knowledge Generation in Java API Reference Documentation
Ms. M. J. Metkar & Prof. S. M. Kamalapur (Published in International Journal of Application or Innovation in Engg. & Management, 20/6/14)
Abstract: Application Program Interface (API) allows programmers to use predefined functions instead of writing them from scratch. Description of API elements that is Methods, Classes, Constructors etc. is provided through API Reference Documentation. Hence API Reference Documentation acts as a guide to user or developer to use API’s. This work focuses on Knowledge generation in the Java API Reference Documentation.
Keywords: API, API Reference Documentation, Knowledge Types.
A Partitioning Method for Large Graph Analysis
Ms. S. R. Deshmukh & Prof. S. M. Kamalapur
(Published in International Journal of Application
or Innovation in Engg. & Management, 20(6) / 14)

Abstract: Large graph is one complex data
structure. It is used to store and represent
information. One must understand its structure
and able to decompose it properly without any loss
of data. Partitioning or clustering methods are used
to decompose a large graph. The proposed graph
partitioning method decomposes a large graph into
subgraphs. It finds most connected components
of every subgraph which are used to form hierarchal
representation of subgraph.

Keywords: Clustering, Graph Partitioning, Large
Graph, Sub Graph.

Swarm intelligence based Gene classification
Ms. Jahagirdar Manasi M. & Prof. S.M. Kamalapur
(Published in International Journal of Scientific
Research and Publications, 16th June 2014)

Abstract: The classification of genes is quite
important in the understanding of gene regulation.
The genes are grouped into transcription units for
the purpose of construction and regulation of gene
expression and synthesis of proteins. This
knowledge further contributes as essential
information for the process of drug design and to
determine the protein functions of newly sequenced
genomes. It is possible to use the diverse biological
information across multiple genomes as an input to
the classification problem. The purpose of this work
is to show that Particle Swarm Optimization may
improve the results of classification as compared to
other algorithms. To validate the approach Ecoli
complete genome is taken as the benchmark
genome.

Index Terms: Classification, Drug Design, Protein
Synthesis, Particle Swarm Optimization, Transcription Units.

Deadlock Detection in Distributed Database
Mrs. I. Priyadarshini & Prof. Dr. S. S. Sane
(Published in International Journal of Research in
Computer engineering and electronics, June 2014,
Vol 3, Issue 3)

Abstract: In a distributed database, data resides in
various sites and several transactions originate at
all the sites randomly needing data item from two or
more sites. These transactions execute concurrently
and thus may lead to a deadlock in which
transactions may enter into an infinite waiting state.
Therefore, the deadlock handling is an important
activity in transaction processing. Thus the
database system uses an algorithm for detecting
deadlock. The task of deadlock detection is complex
in case of a distributed database systems as
compared to the centralized system because of
presence of multiple sites and communication links
and a fear of failure of a site or a link and message
delays etc. The deadlock detection algorithm usually
maintains a wait-for-graph and periodically checks
that it is free of cycles to ensure that the system is
not in a deadlock. The algorithm needs to take care
of false deadlock cycles under the circumstances of
site/link failures and delays in message delivery.
Various approaches exist for detecting deadlock in a
distributed database system. These algorithms are
either centralised or distributed. However many of
the these algorithms does not support data
replication. Data replication improves availability at
the cost of additional storage space. However, as the
cost of storage is becoming cheaper and cheaper,
the modern distributed systems prefer algorithms
that are capable of detecting deadlocks in the
presence of data replication. The paper deals with
the implementation details of one such deadlock
detection algorithm in an replicated database
environment.

Index Terms: Distributed Database, Deadlock,
False Cycle, Replication.

Parallelization of Multipattern Matching on GPU
Mr. Gaurav K. Bhamare & Prof. Satish S. Banait
Abstract: Pattern matching is a highly
computationally intensive operation used in SNORT
system but due to the increasingly storage capacity
and the link speed the amount of data that need to
be match against pattern is increased rapidly and
traditional system is fail to match that data. GPU
Computing Have attracted lots of attention due to
their large amount of data processing. The
algorithm proposed In this paper is use for exact
pattern matching on GPU. Among some famous
algorithms, the Aho-Corasick Algorithm match
multiple pattern simultaneously. Signature
matching is important Technique in virus/worm
detection, but traditional Aho-corasick algorithm
was developed only for string and virus/worm
signature could be in regular expression. In this
research work new guidelines are proposed for an
efficient GPU adaptation of aho-corasick algorithm
for regular expression matching. Also several
 technique is introduced to optimization on
GPU,including reducing global memory access,
storage format for output table. To evaluate
performance proposed system will use SNORT virus
data base. Proposed algorithm implemented on
NVIDIA GTX-680 Graphics card using CUDA.

Keywords: Aho-Corasick, CUDA, Graphics
processing Unit, Pattern Matching, SNORT, DFA,
regular expression.

Prof. Dr. K. N. Nandurkar
PRINCIPAL