ISTE Workshop On ‘Computational Fluid Dynamics’

Two week ISTE Online workshop on ‘Computational Fluid Dynamics’ from 12th to 22nd June 2012 has conducted at our Institute in collaboration of IIT Bombay & sponsored by MHRD, Government of India. This workshop included the delivery of live two-way lectures from IIT Bombay and locally organized tutorial and laboratory sessions. Twenty one participants of different Engineering Institutes participated in the workshop. For this workshop, Prof. P. B. Kushare (Mechanical Engineering department) worked as Remote centre coordinator (RCC), Prof. P. B. Surwade (Mechanical Engineering Department) worked as course-coordinator, Prof. R. V. Bhandare & Mr. N. V. Patil (Mechanical Engineering Department) worked as Network coordinator.

K. K. Wagh Education Society, Nashik has been permitted to start College of Performing Art from Academic year 2012-2013. This college will be affiliated to University of Pune, Conducting courses in Dance (20), Drama (20), Music (20) and Performing Art (20) at Saraswati Nagar Campus, Nashik.

K. K. Wagh Education Society has also started Junior College with Arts (80), Science (80) and Commerce (80) streams from academic year 2012-2013 at its Puria Park Campus, Nashik.

ISTE Workshop On ‘Introduction To Research Methodologies’

An ISTE Online workshop on ‘Introduction to Research Methodologies’ was conducted in the Institute in collaboration with IIT Bombay during 25th June to 4th July 2012. This was organized simultaneously at multiple remote centers across the country, in the distance mode. The workshop included the delivery of live interactive lectures from IIT Bombay, and locally organized tutorial and laboratory sessions. Twenty Seven staff members from various colleges attended this online programme. The goal of the course is to take a researcher through the various aspects and steps of a research project. Topics covered in the course are classified into the following main categories:

- Productive Thinking Skills
- Scientific Method and Experimentation Skills
- Communication Skills – Written and Oral
- Management of research – time management,
- Stress management, professional ethics

Participants of IIT Online workshop on ‘Introduction to Research Methodologies’

Seminars / Workshop / Training Attended By Staff:

- Prof. D. M. Kanade of Department of Computer Engineering had attended two days Faculty Development Programme on ‘Business intelligence and analytics’ at Persistent, Pune during 28th-29th June 2012.

ISTE online workshop on ‘Introduction to Research Methodologies’ by attended by following staff members.
### Sr. No. | Name of Department | Name of Staff
--- | --- | ---
1 | Production Engineering | Prof. Anand S. Rekar, Prof. Nanasaheb B. Gunule, Prof. Hitesh D. Mhatre
2 | Electronics & Telecomm. | Prof. Mahadeo D. Kokale
3 | Computer Engineering | Prof. Ms. Jyoti Mankar, Prof. Mrs. Sheelaj Bhandare
4 | Mechanical Engineering | Prof. Mahesha N. Shelar, Prof. Atul Kumar S. Patil, Prof. Udaykumar V. Saindane
5 | Electrical Engineering | Prof. Ashok M. Jain, Prof. Mrs. Tanuja N. Dave, Prof. Dipak P. Kadam
6 | Chemical Engineering | Prof. Vijay N. Mawal, Prof. Suyog N. Jain

ISTE online workshop on ‘Computational Fluid Dynamics’ by attended by following staff members.

<table>
<thead>
<tr>
<th>Department</th>
<th>Name of staff</th>
</tr>
</thead>
</table>

### Training & Placement:

<table>
<thead>
<tr>
<th>Name of the Department</th>
<th>Name of Company</th>
<th>No. of students selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Engg.</td>
<td>Innovus Infotech India Pvt. Ltd.</td>
<td>02</td>
</tr>
<tr>
<td>Production Engg.</td>
<td>Mahindra &amp; Mahindra, Satpur</td>
<td>02</td>
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<tr>
<td>Mechanical Engg.</td>
<td>Atlas Copco, Mahindra &amp; Mahindra, Satpur</td>
<td>10</td>
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<tr>
<td>Electrical Engg.</td>
<td>Graphite India Ltd., Jindal SAW</td>
<td>04, 01</td>
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</tbody>
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### Other Achievements

- Principal Dr. K. N. Nandurkar attended meeting of CII Nashik Zonal Council officials with Mr. Pradeep Bhargava, Chairman CII Western Region at ABB Ltd., Nashik. Mr. Bhargava appreciated the efforts done by K. K. Wagh Institute of Engineering Education & Research for arranging Faculty of the School for reserved category students as part of CSR initiative by CII Nashik. The new batch of teaching will be starting from August 2012.

- Prof. Dr. K. N. Nandurkar has been approved as expert member of NBA team by National Board of Accreditation, New Delhi. He was also invited by Modern Education Society’s College of Engineering, Pune for guiding their staff members about preparation for NBA on 13th June 2012. Around 60 staff members attended this presentation.

- Prof. M. B. Zhade of Department of Computer Engineering has been deputed as Principal of K. K. Wagh Polytechnic, Chandori, Nashik.

- Prof. Monali Metkar of Computer department gets certification and trophy from IIT Bombay for Coordination of spoken tutorials.

- Prof. Dr. B. E. Kushare, Head of Department of Electrical Engineering had offered electrical consultancy services to Times of India Airoli, Times of India Kandivali, EPCOS, BOSCH Ltd., Nashik and Zylog Ltd., Sinnar.

### Abstracts of Papers Presented during June 2012: Future Research Directions in Skyline Computation

Prof. Mrs. R. D. Kulkarni (Published in International Journal of Computer Engineering and science (IJCES), Volume 2, Issue 5 (May 2012), ISSN 2250:3439)

**Abstract:** Social The purpose of this paper is to put focus on the current trends in the area of skyline computation which is a computational trend related to database research community and also to highlight the further research directions in the same. In recent years, the skyline queries or skyline computations have been used in many advanced applications such as location based systems originated from the mobile phones. Although the concept of skyline computation originated from centralized database environment, the application needs grew, and the concept has been applied successfully to modern computational environments like distributed networks, real-time systems, mobile ad hoc networks etc. This paper aims at unfolding the various recent methodologies used till now, for the skyline computation and then highlights the future research directions in this area.

**Keywords:** Skyline computation, Skyline Queries, Modern Computational Environments

### Detecting Image Forgeries using Discrepancies in Motion Blur

Prof. Rupali M. Bora & Prof. N. M. Shahnane (Presented at National conference ‘PGCON2012’ organized by University of Pune, Pune)

**Abstract:** It is easy to manipulate images for malicious purposes due to widespread availability of photo manipulation software. Image splicing is one such form of tampering. Various methods have been proposed for detecting such splicing. An attempt has been made to detect splicing in images by searching discrepancies in motion blur. The motion blur estimation is through image gradients in order to detect inconsistencies between the spliced region and the rest of the image. A Blur Estimate Measure (BEM) is used to assist in inconsistent region segmentation in images that contain small amounts of motion blur and a no-reference Perceptual Blur Metric (PBM) is used to detect directional blurs in images. The selection of PBM is based on threshold, which should be set by the user. Based on these measures the regions of images are identified with consistent and inconsistent blurs. Studying the effect of Recursive Otsu’s method which deal with threshold-based segmentation and may give better results is the aim.

**Keywords:** Image gradient, image forgery detection, motion blur estimation, Blur Estimate Measure, Perceptual Blur Metric, Recursive Otsu’s method

Prof. Dr. K. N. Nandurkar PRINCIPAL