SVKM's NMIMS

MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

(SHIRPUR CAMPUS)

Newsletter Department of Computer Science

JAN -JUNE 2020

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From the Desk of Associate Dean, MPSTME, Shirpur

Dr. Narayan Chandak

Today, I am delighted and proud to introduce the Jan-June 2020 issue for Department of Computer Science, Newsletter . Within its pages, a rich tapestry of co-curricular and extra-curricular activities unfolds, offering a vibrant tableau of life at MPSTME, NMIMS, Shirpur. Notably, this edition spotlights the remarkable accomplishments of faculty members and students, highlighting their exceptional contributions to our academic community. The Newsletter encapsulates a kaleidoscopic panorama of significant endeavors undertaken during the past six months. Its pages are imbued with the energy, passion, and dedication that define the spirit of Department of Computer Science, MPSTME, Shirpur. I extend my heartfelt appreciation to the diligent editorial team and the dedicated departmental coordinators who have lent their expertise and effort to bring this publication to fruition.

From the Desk of HOD, Department of Computer Science,

Dr. Nitin Choubey

We are delighted to present this edition of the Department of Computer Science Newsletter, showcasing a vibrant collection of highlights from the past six months (January to June 2020) at MPSTME, Shirpur Campus. This issue offers colorful glimpses of notable achievements, campus activities, alumni insights, workshops, guest lectures, and technological updates. We sincerely thank the faculty coordinators for their timely contributions to this publication.

From the Desk of Editors

In the age of globalization, to build a truly different institution of engineering and technology in India, an institution with a marked difference in quality to serve the local people in the global arena. Our aim is to build an effervescent community of engineers and managers, where faculty and students are cronies in a mutually inspirational education process, engrossed in learning. This Newsletter will definitely help to showcase the activities happening in the campus. It helps to build up teamwork which is needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty. This enhances the documentation culture of the institute. This would definitely create an impact in the minds of readers, by way of providing larger visibility and dimension to the campus. We hope that this culture of releasing Newsletter continue forever and become a quoted example for all other institutions to follow. It gives us immense pleasure and pride to share the latest edition of this newsletter with you all. The Newsletter has presented a record of various co-curricular and extra-curricular activities conducted at Department of Computer Science, MPSTME Shirpur. Special mention of achievements of faculty members and students has also been made. We hope that the Newsletter acts as a catalyst for all others and inspires them for personal and institutional glory. We would like to congratulate the editorial team for putting in untiring efforts to bring out this edition.

Team Newsletter – Department of Computer Science

- ➢ Advisors :
    - ❑ Director, MPTP, NMIMS, Shirpur Campus
    - ❑ Associate Dean, MPSTME, Shirpur
- ➢ Editors from CS Dept
    - ❑ Prof. Bhushan Inje
    - ❑ Prof. Varsha Nemade
- ➢ Department Faculty Coordinator
    - ❑ Prof. Dhananjay Joshi
- ➢ Department Student Coordinator
    - ❑ Yash Mehta

About the Department

Department of Computer Science at Mukesh Patel School of Technology Management and Engineering started in the year 2007. The B.Tech in Computer Science programme at SVKM's NMIMS, MPSTME focuses on teaching the fundamentals of hardware and software, algorithm analysis, and mathematics and science knowledge. The programme provides students with solid programming and engineering fundamentals as well as research and innovation skills in Computer Science. Artificial Intelligence, Machine Learning, Data Analytics, Cloud Computing, High-Performance Computing, Internet of Things, Network and Cyber Security, are among the cutting-edge technologies taught by experienced and eminent faculty.

Vision of the Department

To excel in computer science education and research, by preparing the students with practical knowledge and ethical values. We strive to empower students, enabling them to innovate using cutting-edge computing technologies to address societal challenges.

Mission of the Department

- Empower students with a strong foundation in computer science fundamentals and technical skills through innovative teaching pedagogies, fostering practical knowledge.
- Cultivate ethical values, creativity, and an entrepreneurial mind-set among students to inspire innovation.
- Encourage students to prioritize sustainable solutions that enhance societal well-being.
- Foster a culture of research excellence in computer science by fostering collaborative partnerships between academia and industry.

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO 6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

P:O 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1: Demonstrate the knowledge of computer science to implement programming concepts and deliver efficient solutions for emerging challenges in the computational domain

PSO2: Inculcate professional, social, ethical, and entrepreneurial practices to solve real-world problems in various domains.

Workshop/Webinar/FDP/STTP organized by Department

FDP on "Fundamental Digital Skills for 21st Century Teachers"

A four-day Faculty Development Program (FDP) on "Fundamental Digital Skills For 21st Century Teachers" was organized by Innovative Entrepreneurship Development Center (IEDC) and the Department of Computer Science from 06th to 09th January 2020. Purpose of the FDP was to provide overview of digital technology for teaching-learning process to teaching professionals and to foster dialogue between teachers and learners with the help of Fundamental Digital Technologies. The FDP was inaugurated on 6th January in the august presence of Dr. Mohan Bhagwat as the Chief Guest. Dr. Bhagwat delivered a session on "Overview of IT-tools in e-learning" followed by two continuous hands-on sessions on "Effective Presentations" and "Remote Presentations" by Dr. Santosh Bothe. "Research Writing Tools and Presentations" was the theme on 7th January. Dr. Kapil Kumar Nagwanshi conducted two sessions on research writing using LaTeX tool and one session on research writing using MS Word. On 8th January, Dr. Ram Mangrulkar delivered an interactive session on "Google Class Room, Overleaf (Research Writing Tool, Plickers)" followed by two hands on session on it. On 9th January, Dr. Santosh Bothe delivered session on "Content Development and Authoring". A session on "Content Development for Teaching Learning Process" was conducted by Dr. Payal Dande. The FDP ended with a summary by Dr. Santosh Bothe and address by Dr. N. K. Sharma (Director, Engineering Programs). Vote of thanks was delivered by Dr. N. S. Choubey, Head CS Department.

Pariksha Pe Charcha (PPC-20):
An Address by Hon. PM Shri Narendra Modi Ji

Prime Minister Narendra Modi on 20th January 2020 interacted with students, teachers, and parents during his 'Pariksha Pe Charcha 2020' programme. The third edition of Prime Minister's interaction programme with school students 'Pariksha Pe Charcha 2020' was held at Talkatora Stadium in New Delhi. During the programme, PM Modi answered the questions and interacted with selected students about how they can beat examination stress. Around 2,000 students participated from all over India in the programme. The PPC -20 witnessed a lot of excitement and enthusiasm seen among the students, teachers and parents to not only participate in the unique event but also to receive valuable tips from the Prime Minister who is keen to ensure that the students take exams in a relaxed atmosphere and do not come under stress, to ensure better results in the long run. At SVKM's NMIMS Shirpur Campus, the live telecast of PPC-20 was organized for students. The Campus is equipped with smart boards in each class rooms having latest technology to play live telecasts in real time in the Lecture Rooms. The program was telecasted in all the classes as per the schedule of transmission on 20th January 2020 from 11.00 AM to 12.30 PM.

• CAMPUS ACTIVITIES

Blind Code Event

CSI organized BLIND CODE during AMBIORA'20 held on 8th February, 2020 at 3:00 PM in ACN Lab under the supervision of Prof.Varsha Nemade. Mr. Sumit Bhardwaj and Mr. Yash Agarwal successfully conducted the event, where the participants were asked to solve a few algorithms without looking at the computer screens. A total of 35 students participated in the event to make it a success. DHRUMIL TALATI and VAIBHAV JAIN were declared as winners.

DOUBLE OR NOTHING

CSI organized DOUBLE OR NOTHING during AMBIORA'20 held on 7th February, 2020 at 5:00 PM in LECTURE ROOM-19 under the supervision of Dr.Upendra Verma. The event was successfully conducted by Ms. Kerin Pithawala, where a technical quiz was conducted. Participants were given some points in hand, which they can use to answer questions. Each correct answer got them double the points and wrong one would cost them the same. The event had a positive response with more than 25 students participating in it. Mr. Samyak Shah was declared as the winner for the event.

Code Hunt Event

CSI organized CODE HUNT during AMBIORA'20 held on 7th February 2020 at 6:00 PM in Programming Lab-1 under the supervision of Prof. Suraj Patil. The event was successfully conducted by Mr. Shashwat Tare where students were given ambiguous code which they had to debug. Clues were given in each round, the ultimate goal was to reach the final destination. More than 30 students participated in the event, making it a success.The winners were Akanksha Yadav and Phalguni Bhatia.

Online Quiz Conducted on "Basics of Web Programming"

An online quiz was conducted by Information Technology Department for undergraduate students on "Basics of Web Programming" during 23rd -24th June 2020. The quiz was free with provision of e-certificate to the student with more than 60% score. Prof. Dhananjay Joshi was the faculty coordinator for the event. 273 students had participated in the quiz and 239 have qualified for e-certificates. Also 21 students had scored 100% marks.

• INDUSTRIAL VISITS & SURVEYS

Computer Science

The Department of Computer Science, Mukesh Patel School of Technology Management & Engineering organized a one-day long educational visit to ESDS Software Solution Pvt., Nasik, Maharashtra on 6th of February 2020 for Third Year B. Tech. students. ESDS has expertise in Managed Data Center Services, Managed Cloud Solutions, Virtualization and Disaster Recovery Hosting, which is backed with exuberant Technical Support that has helped ESDS build lifetime relationships with customers.Students got information about the campus and the workings of cloud network through a technical presentation by Mr. Harshal Patil at 1:00 PM. The Technical Head of ESDS Software Solution Pvt. Ltd. Conducted very informative session for the students. The representatives also guided the students to select areas like cloud development, virtual machine application development & software testing etc. and its importance in the software market.

• FACULTY DEVELOPMENT

Publication

S.N.	Author	Title	Journal	ISSN No.	Volume	Date	Pub. By	IF
1.	Dr Kamal Mehta Dr Manisha Sharma Rajesh Tiwari	Dynamic Load Distribution to Improve Speedup of Multicore System Using MPI with virtualization.	International Journal of Advanced Science and Technology	2005-4238	Vol 29-PP 931-940	June 2020	Science and Engineering Research Support Society Australia	0.41
2.	Dr Kamal Mehta Dr Mohan Awasthy Prof Moon Banerjee	Mobile Robot Path Planning using Weight Grid Algorithm	International Journal of Control and Automation	2005-4297	Vol 13/PP 477-484	June 2020	Science and Engineering Research Support Society Australia	0.56
3.	Upendra Verma, Diwakar Bhardwaj,	Design of Lightweight Authentication Protocol for Fog enabled Internet of Things- A Centralized Authentication Framework	International Journal of Communication Networks and Information Security (IJCNIS)	2076-0930	Vol. 12	Aug 2020	International Journal of Communication Networks and Information Security (IJCNIS)	-

Faculty Development Programs

S. N.	Name of the Faculty Member	Name of the FDP	Date	Place	Organising Body / Inst.
1.	Prof. Sachin Chavan	Deep Learning Part-1	4/1/2020	Online	IIT Madras
2.	Prof. Deepti Barhate	Introduction to Machine Lerning and data analytics	6-14 May 2020	Online	IIT roorkee
3.	Prof. Upendra Verma	Patent Drafting for Beginners	Jul-Aug 2020	Online	IIT Madras
4.	Prof. Bhushan Inje	One Day Workshop on Arduino	2/8/2020	Online	IIT Bombay
5.	Prof. Suraj Patil	Introduction to Machine Lerning and data analytic	6-14 May 2020	Online	IIT roorkee
6.	Prof. Varsha Nemade	Introduction to Machine Lerning and data analytics	5-13 May2020	Online	IIT roorkee
7.	Prof. Dhananjay Joshi	ML and AI Using COVID-19 Data Analysis	16th and 17th May 2020	Online	IIT Rookee

• **FACULTY DEVELOPMENT**

Coursera Certificates Count

No	Name of the Faculty Member	Coursera Certificate Count
1	Prof. Sachin Chavan	10
3	Prof. Dipti Barhate	3
5	Prof. Bhushan Inje	4
7	Prof. Suraj Patil	1
8	Prof. Varsha Nemade	4
9	Prof. Dhananjay Joshi	12

Patent Information

No.	Faculty	Name of Patent	Date	Patent Application Number
1	Dr. Radhakrishan Rambola	System of cyber security for a cloud environment with network visualization	06/03/2020	202011007706