Xavier Institute of Engineering

JESUIT INSTITUTES

COMPUTER SOCIETY OF XAVIERITES

(CSX)

ACADEMIC YEAR 2018-2019

JESUIT INSTITUTES

JESUITS FOR THE GREATER GLORY OF GOD

CSX Editorial Team

Prof. Jyotsna More (CSX Convener)

Ms.Shrishti Karkera (TE IT)

Ms.Archana Sahoo (TE COMP)

Fr. Dr. John Rose S.J.
(Director XIE)

Dear Members of CSX,

It was my dream that XIE forms a Computer Society of Xavierites wherein every member gets an opportunity to bring out his / her talents and contribute to XIE family. It has been achieved with concerted efforts of our Dean, Prof. Meena Ugale, who has been giving unconditional support to the talented students of XIE. It is amazing and heartwarming to know that CSX has conducted a number of short term courses contributing to skill development. Bravo. Keep it up. My full support to all the creative works you do.

With best wishes,
Fr. Dr. John Rose, SJ.

Dr. Y.D. Venkatesh, phD
(Principal XIE)

Dear Members of CSX,

A few years ago, we used to ask students about becoming members of the Computer Society of India. Our students after becoming members did nothing substantially. Then we started telling CSX to become more active at XIE. It has been now greatly achieved and cherished by all the members of CSX. The Computer Society of Xavierites is like a lampstand that sheds light around XIE wherein all others can be enlightened with sound technical knowledge. I encourage all to make use of CSX's activities and become brilliant engineers and take XIE to the next level. I extend my full support to CSX.

Best.
Dr. Y. D. Venkatesh, PhD

Prof. Meena Ugale
(Dean, Students' & Staff Welfare)

Dear Members of CSX,
The idea to form Computer Society of Xavierites is to encourage the students to learn the different technologies and use them in designing different projects. CSX is the platform where students learn, contribute and share their technical knowledge. CSX gives students the experience of being a workshop speaker, organizers, volunteers and attendees. CSX promotes different technical activities such as seminars, guest lectures, workshops, project competitions, etc.
I wish more and more students get benefited from CSX activities.

"Learning gives creativity
Creativity leads to thinking
Thinking provides knowledge
Knowledge makes you great."- A.P. J. Abdul Kalam

"Change is the only thing that is constant in today's technological world"

Prof. Jyotsna More

(CSX Convener)

"Anyone who stops learning is old, whether at twenty or eighty."

— Henry Fordis constant

Prof. Kunal Meher

(CSX President)

Computer Society of Xavierites (CSX) was formed in August 2018. The objective of CSX is to increase technical knowledge among Xavierites. All students are encouraged to join CSX. This forum provides an opportunity to our students to build on existing skills and imbibe new ones. You can be a workshop speaker, organizer or coordinator. This group will increase self-confidence and provide a platform for technical interaction both inside and outside the Institute. It includes activities such as guest lectures, workshops, project exhibitions, competitions and many more. CSX nurtures and moulds the students to enter and compete in the rapidly changing technical arena.

Computer Society of XAVIERITES (CSX) allows students to exchange views, information and share ideas of current technology among themselves. The main purpose of CSX is to enhance technical knowledge of the students of Xavier Institute of Engineering. It is platform for the students to learn the technologies. Also, the students are also encouraged to deliver workshops as a resource person.

CSX Committee

Academic Year 2018-2019

Committee Members:

Prof. Meena Ugale – Dean Students' and Sta ffWelfare

Prof. Kunal Meher – CSX President

Prof. Jyotsna More – CSX Convener

Prajakta Pednekar (TE.IT.) – Committee Member

Jay Barot (TE.IT.) - Committee Member

Rickita Baptista (TE. Computer) - Committee Member

Aditya Aspat (TE. Computer) - Committee Member

Shrishti Karkera (SE.IT) - Committee Member

Raj Joshi (SE.IT.) - Committee Member

Yeshwin Anil (SE. Computer) - Committee Member

Archana Sahoo (SE. Computer) - Committee Member

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Vision & Mission

VISION OF XIE

To nurture the joy of excellence in a world of high technology

MISSION OF XIE

To strive to match global standards in technical education by interaction with industry, continuous staff training and development of quality of life

VISION OF IT Department

To nurture the joy of excellence in a world of Information Technology

MISSION OF IT Department

M1. To develop the critical thinking ability of students by promoting integrative learning.
M2. To bridge the gap between industry and institute by giving students exposure to industrial demands and current trends.
M3. To promote excellence in learning and research, and to be responsible when dealing with social concerns.
M4. To encourage students to pursue higher studies and make them aware of various career opportunities.

VISION OF COMP. Department

To nurture the joy of excellence in a world of Computer engineering.

MISSION OF COMP. Department

M1: To generate high quality professionals with emphasis on global standards of Computer Science and Technology
M2: To prepare industry-ready students by providing training in line with industrial requirements
M3: To nurture social and ethical values in undergraduates to help them to improve quality of life.

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PEO of Department

PEO of Information Technology Department

After 3-5 years of graduation, Information Technology Engineering Graduates will be.

PEO1:employed as IT professionals, and will be engaged in learning, understanding, and applying new ideas and technologies as the field evolves.

PEO2:competent to use knowledge successfully in the diversified sectors of industry, academia, research and work effectively in multidisciplinary environments.

PEO3: aware of professional ethics and create a sense of social responsibility in building the nation/society.

PEO of Computer Engineering Department

After 3-5 years of graduation, Computer Engineering Graduates will be,

PEO1:To prepare the learner with a sound foundation in the mathematical, scientific and engineering fundamentals.

PEO2: To motivate the learner in the art of self-learningand to use modern tools for solving real lifeproblems.PEO3: To equip the learner with broad education necessary to understand the impact of computer science and engineering in a global and social context.

PEO4: To encourage, motivate and prepare the learners for lifelong-learning.

PEO5:To inculcate professional and ethical attitude, good leadership qualities and commitment to social responsibilities in the learner's thought process.

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Events

Computer Assembly Workshop

Conducted on 08th Feb, 2019 at 4:30pm, the workshop took place on the 1st floor, Computer Centre, Xavier Institute of Engineering, S. L. Raheja Hospital Road, Mahim.

The resource persons for which were Jay Barot (TE IT) and Shivang Medhekar (TE Comps).

The prime objective of organizing the event is to teach the students the fundamental parts of a computer and also how to assemble it and they can later build their own PCs.

Since it was the first workshop, it was a free workshop.

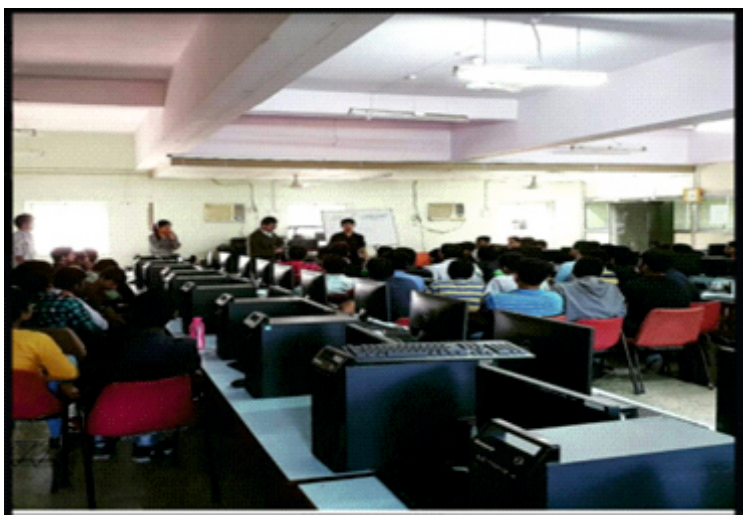
The students from the FEs showed a huge interest in this workshop.

All the students gathered in the computer centre by 4:30pm. The total count for the event was 61.

One working CPU was assembled and shown to the students.

All the information about various parts of the CPU was given to them. After the explanation part, the students were given all the parts to assemble a PC.

While assembling, all the doubts of the students were cleared.



The coordinators for the workshop were:

Archana Sahoo (SE Comps), Yeshwin M. Anil (SE- COMPS), Rickita Baptista (TE-COMPS) and Aditya Aspat (TE-COMPS).

Web Development Workshop

It was conducted on 2nd March 2019 at 12:00pm, 3rd March 2019 at 9:00pm and 4th March 2019 at 9:00pm being a 3 day workshop, held at the Computer Centre, 1st floor, Xavier Institute of Engineering, S. L. Raheja Hospital Road, Mahim.

The resource persons of which were Jay Barot (TE IT), Shivang Medhekar (TE Comps) and Soham Khot (TE Comps)

The coordinator was Shrishti Karkera (TE IT).

The prime objective of organizing the event is to teach the students the fundamentals of web development enabling the students to build a website on their own from scratch which will be helpful for them in their further projects.

The students from the SEs showed a huge interest in this workshop having total count for the event was 41.

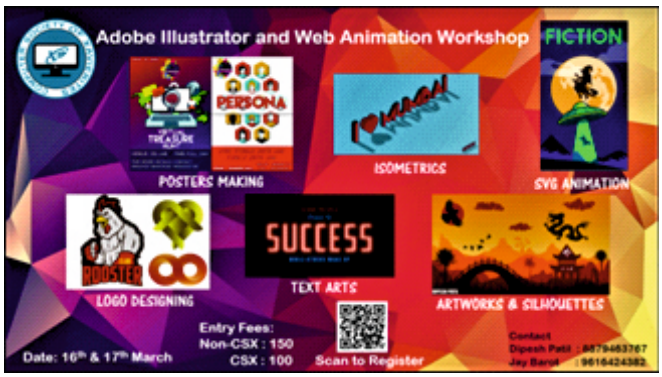
First day contained briefing the students about the fundamentals of Web Development, HTML and CSS including Bootstrap.

On the second day, the students started to develop a fully functioning website. Various components were added to the website.

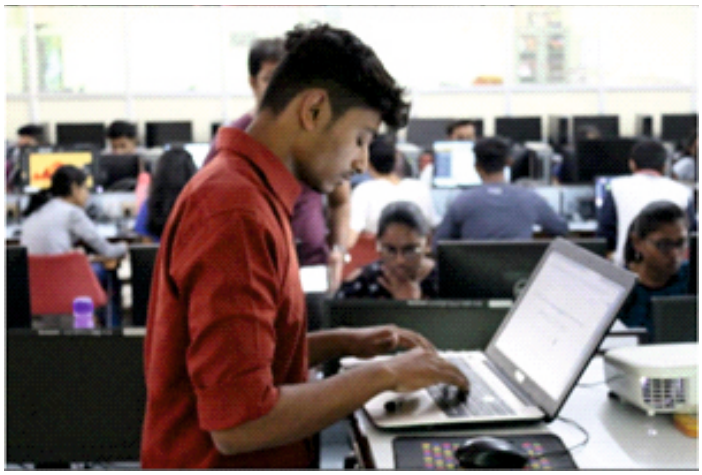
The third day consisted of topics like PHP and SQL including hosting the website and all the remaining doubts we're solved by resource persons.

The event turned out to be a very successful one which attracted everyone towards attending more workshops under CSX

Web Animation and Adobe Illustrator Workshop



It was conducted on 16th and 17 th March 2019 from 9.30 am to 5.30 pm at the Computer Centre, 1st floor, Xavier Institute of Engineering, S. L. Raheja Hospital Road, Mahim.
The resource persons of which were Dipesh Patil (TE Comps) and Shivang Medhekar (TE Comps)
The coordinator was Prajakta Pednekar (TE IT).



The prime objective of organizing this event is to teach the students the basics of adobe illustrator from the scratch and how to use various adobe illustrator tools including CSS animation so that at the end they can create a web animation project on their own from their own illustrated artworks.

The students from the FEs showed a huge interest in this workshop. The total count for the event was 29 students.

Workshop started with first sessions on Adobe Illustrator on day one where students were taught how to use various tools like shape builder tool, pen tool, gradient tool, mesh tool, how to apply different stylize , 3D effects and were taught to export illustrator file using different file types (SVG, PSD, PDF, JPEG, PNG, etc) and how to create emoticons.

The students created different artworks like logo, text styling, etc in illustrator (using 3D, drop shadow, isometric shapes, text styling and many more concepts).
The second day workshop began with web animation part where students were taught first the basic of CSS animation code and then how to import and use SVG files to create web animation Students created the web animation on their own from SVG file created by them in adobe illustrator using different tools. The students can now do freelancing. They can apply web animation to their illustrator artworks SVG file and create more interesting and attractive websites.

PROJECT COMPETITION

It was conducted on 29th March 2019 from 9:30 am to 04:30 pm at the Seminar Hall, 2nd floor, Xavier Institute of Engineering, S. L. Raheja Hospital Road, Mahim.

The coordinators for the same were:
Prajakta Pednekar (TE IT)

Rickita Baptista (TE-COMPS)

Aditya Aspat (TE-COMPS),

Shrishti Karkera (SE IT),

Archana Sahoo (SE COMPS),

Yeshwin Anil (SE COMPS)

Raj Joshi (SE IT)

In all, 83 groups presented their B.E./Mini Projects. One mini project proposed a java based application with features designed to calculate the different parameters related to process scheduling.

This application can be thought of as a calculator for calculating the different parameters related to ***process scheduling***.

Another project was based on detection of facial expressions i.e. ***Facial Expression Based Music Player.*** A camera built-in the phone is used to capture the facial expression of a person which reduces the designing cost.
Above mentioned combination of algorithms together achieves up to 75.3% accuracy level in recognizing the expression, decoding the

underlying emotion and playing the music accordingly. The expressions are detected more clearly by using the PCA (Principal Component Analysis) and Euclidean Distance classifiers. Another one was a ***Smart Shopping Cart.*** It is an application where it combines IoT Core and Machine Learning Engine.

A student is normally required to undertake a research oriented project in their final year of study.

Aim of the final year project to develop student's knowledge for solving technical problems through structure project research study in order to produce competent and sound engineers. All the participants were provided with participation certificates and the best three projects were selected and rewarded cash prize based on the judging.

• The winning teams - BE projects were:

Tushar Adivarekar - Disha Hegde

Prajgot Bhatkar – Naman Takrar – Vishal Tiwari

Shreya Thembe.

• The best three of the Mini Projects were of the teams:

Shubam Vaity – Hemendra Naik – Sai Vasudatta

Rohan Vaidya – Devans

Rohan Joshi – Rohan Paranjpe – Hiralal Purohit.

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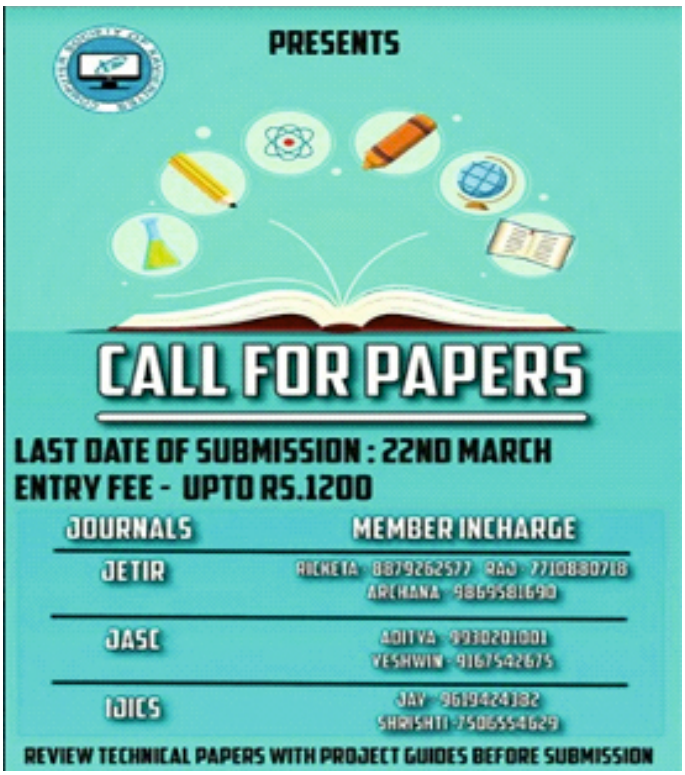
CALL FOR PAPER



JETIR (**Journal of Emerging Technologies and Innovative Research**): Rs. 800

JASC (***Journal of Applied Science and Computations***): Rs. 1200

IJICS (**International Journal of Information and Computing Science**): Rs. 400

The collections were done till the date 22nd March 2019. Coordinators (to whom students need to pay the money for respective journal) were Rickita Baptista (TE-COMPS), Archana Sahoo (SE COMPS), Yeshwin Anil (SE COMPS), Aditya Aspat (TE-COMPS), Shrishti Karkera (SE IT) and Jay Barot (TE IT)

No. of papers submitted (per journal) were JETIR: 03 JASC: 12 IJICS: 21. As the no. of papers submitted for journal JETIR was less, that's why the idea of publishing papers in that journal was dropped and only rest of the two journals are considered at the end. IJICS, JASC Journals publish original articles, research articles, review articles with top-level work from all areas of Engineering Research and their application including Mechanical, Civil, Electrical, Chemical, Electronics, Mathematics and Geological etc. Researchers in all technology and engineering fields are encouraged to contribute articles based on recent research. Journal publishes research articles and reviews within the whole field of Engineering Research, and it will continue to provide information on the latest trends and developments in this ever-expanding subject. Both the journals were UGC Certified journals. Benefits of publishing your own technical papers:

1. **To help improve writing and research skills.**
2. **To professionalize the undergraduate experience.**
3. **To connect with professors and researchers.**
4. **To experience the scholarly publication process.**
5. **To display leadership and initiative.**
6. **To inform a future career path.**