St. Thomas' College of Engineering and Technology
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Bits and Bytes

Volume: CSVI, ISSUE: I, JANUARY 21, 2021

Vision of the Department

To continually improve upon its teaching-learning process and research with a goal to develop technical manpower with sound academic backgrounds, who will respond to challenges and changes faced by dynamic scenario of Computer Science and Engineering.

Mission of the Department

- To inspire the students to work with latest tools and to make them industry ready.
- To impart research based technical knowledge.
- To groom the department as a learning centre for inculcating advancement of technology in Computer Science and Engineering with social and environmental awareness.

Program Educational Objective of Computer Science and Engineering

- To educate students to solve the problems for analysis and implementation of algorithms leading to optimal solutions fulfilling the dynamic requirement of industry and society.
- To inculcate into students the understanding of Computer Science and Engineering for grooming would be practicing engineers with sound knowledge of logic and design.
- To execute research in emerging fields in computer science and engineering so as to face the challenges of global competitiveness.

Departmental Milestones

Performance in the Smart India Hackathon 2020:

Adrish Bose, **Gitanshu Gupta, Ishani Deb**, **Suchita Haldar** and **Malika Dutta**, 2nd year were top five finalists in the Grand Finale of Software Edition of Smart India Hackathon 2020 which was held on 3rd August, 2020.

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Student's Achievements:

- **Ankita Nandi**, 2nd year has secured "State Sixth" position in the state of West Bengal among essays written in English which was organized by Shri Ram Chandra Mission, United Nations Information Centre and the Heartfulness Education Trust(30th September,2020).

- **Abhirup Bhattacherjee**, 2nd year has achieved CEFR C1 (valid from 2nd July, 2020 to 2nd July, 2021) in the test which was held on 2nd July, 2020 of English Proficiency conducted by British Council.

- **Rudrajit Choudhuri,** 3rd year has the Machine Learning Track Winner at Google Devfest India (16-18th October, 2020). He also secured 2nd position in Online Business Plan Competition organised by EDC cell, STCET (18th November, 2020).

- **Sounav Saha,** 2nd year is the Winner in the DB Category (Best Use of Cockroach DB) in a Hackathon named Who-Wants-To-Be-A-Hackionaire hosted by Major League Hacking (MLH) on 29th November, 2020. He is also Winner (Best Use of DataStax Astra) in a Hackathon named Shark-Hacks hosted by Major League Hacking (MLH) on 6th December, 2020.

- **Shubhashish Moitra**, 3rd year has Qualified National Engineering Olympiad (24th September, 2020). He has successfully completed Training at Internship Studio (2nd November to 9th December, 2020) as well as an Internship in ML with a project Youtube Adview Prediction (10th December, 2020).

- **Chayani Basak**, 2nd year is the Winner-Poster making Competition by Furenergy-Grid (September, 2020).

Participation in Online Course:

- **Adityaprava Sen**, 1st year has successfully completed 28 total hours online courses on *The CompleteJavaScript Course 2020: Build Real Projects!* on 23rd June, 2020 and 21 total hours online courses on *Modern HTML & CSS From The Beginning (Including Sass)* on 7th July, 2020 by Udemy.
- **Aditi Bose** 2nd year secured GOLD and ELITE with 94% in *The Joy of Computing using Python* 16 weeks (Sep-Dec 2020) NPTEL course.
- **Srijita Bhattacharjee** 2nd year secured GOLD in *The joy of Computing Using Python* 16 weeks (Sep-Dec 2020) NPTEL course. She also secured SILVER in *Programming Data Structures and Algorithms using Python* 12 weeks (Sep-Nov 2020) NPTEL course.
- **Chayani Basak** 2nd year secured GOLD certificate in *Technical English for Engineers* 8 weeks (Sep-Oct 2020) NPTEL course.

Events/ Workshop Organized

- An Online Faculty Development Program on "Research Methodology and Document Preparation in LATEX" was conducted from 17th August to 21st August, 2020.
- One Summer Workshop for 2nd year CSE students on "Cloud Computing and its Applications" from 17th July to 18th July, 2020 was organized by department of Computer Science & Engineering in digital platform (Google Meet). The Convener of this Workshop was Prof. Amiya Halder.
- Different online activities were organized as follows:
  - Online Extempore (3rd July, 2020)
  - Webinar on Technology Applied in Physics (9th July, 2020)
  - Webinar on Pandemic 2020 (10th July, 2020)
  - Online Waste Material Management Model Making (13th to 14th July, 2020)

➢ Webinar on Pointers in C Revisited (16th July, 2020)
➢ Photography Web Summit (22nd July, 2020)
➢ Online GK Quiz Competition (29th July, 2020)
➢ Webinar on Sustainability in the Modern Era with Smart Application (7th August, 2020)

Faculty Participation in Online Course

- **Dr. Mousumi Dutt** has successfully completed 5-days (1st December – 5th December, 2020) online FDP on *Internet of Things (IoT)* organized by STCET.
- **Mr. Samrat Sarkar** has successfully completed One-Week FDP from 1st July – 6th July, 2020 on *PHP & MySQL* Hosted by Syed Ammal Engineering College, Ramanathapuram, in association with Spoken Tutorial Project, IIT Bombay funded by National Mission on Education through ICT, MHRD, Govt. of India.
- **Mr. Subhankar Mallick** has successfully completed 5-days (28th July – 1st August, 2020) online Workshop on Universal Human Value on the theme *Inculcating Universal Human Values in Technical Education* by AICTE, 5-days (1st December – 5th December, 2020) online FDP on *Internet of Things(IoT)* organized by STCET, 6 days(14th December – 19th December, 2020) online STTP on *Machine Learning, Pattern Recognition and their Applications* organized by STCET, 5-days (2nd November – 6th August, 2020) online Workshop on Universal Human Value on the theme *Inculcating Universal Human Values in Technical Education* by AICTE .
- **Mr. Debashish Chakraborty** has successfully completed 5-days (17th August – 21st August, 2020) online FDP on *Research Methodology and Document Preparation in LATEX* organized by STCET.

Publication Details

- Md A. Aman, Apurba Sarkar, **Mousumi Dutt**[†], Arindam Biswas, "A linear time combinatorial algorithm to compute the relative orthogonal convex hull of digital objects", Theoretical Computer Science, Elsevier, Vol. 847, 103-121, 22 December 2020.
- **B. Datta**[†], K. Dutta and S. Roy, "Data hiding in virtual bit-plane using efficient Lucas number sequences", Multimedia Tools and Applications, Springer, Vol. 79, 22673–22703, 2020.

[†] **Publications by college faculty**
[*] **Publications by college students under the guidance of college faculty**