# St. Thomas' College of Engineering and Technology
### 4, Diamond Harbour Road, Kidderpore, Kolkata- 700023

## VISION OF THE DEPARTMENT

To continually improve upon the teaching-learning processes and research with a goal to develop quality technical manpower with sound academic and practical experience, who can respond to challenges and changes happening dynamically in Computer Science and Engineering.

## MISSION OF THE DEPARTMENT

**Editors:**
1. Dr. Mousumi Dutt,
Assistant Professor

2. Mr. Amit Paul,
Assistant Professor,

3. Ms. Aishwarya Murmu,
B. Tech,
$2^{nd}$ Year,

- 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 to inculcate advanced technologies in Computer Science and Engineering with social and environmental awareness.

## RECENT TECHNOLOGY TREND

**For
Further Information
Contact:**
mousumi.dutt@stcet.ac.in

The compression of digital audio data is an important topic. Compressing the data storage requirement of digital audio allows us to fit more songs into our ipods and download them faster. We will apply ideas from interpolation, least-square approximation, and other topics, in order to reduce the storage requirements of digital audio files. All of our approaches replace the original audio signal by approximations that are made up by a linear combination of cosine functions.

**Dr. Subarna Bhattacharjee**
**Head of the Department,**
**Department of Computer Science and Engineering,**
**St. Thomas' College of Engineering and Technology**

**For Feedback Contact:**
amit.paul@stcet.ac.in

# Departmental Milestones

**Best Performance in University Examination:**
- **Nicole Belinda Dillen**, 4th Year, YGPA: 9.46
- **Prachi Nigania**, 3rd Year, YGPA: 9.65
- **Nikita Shah**, 2nd Year, YGPA: 9.55
- **Priya Roy**, 1st Year, YGPA: 9.61

**Best Project Award:**
Jayashri Banerjee and Anwesha Datta won Best Project Award on the topic "Remote Irrigation Management System" in Project Competition organized by Cognizant Technology Solutions

# Publication Details

1. A. Sarkar, A. Biswas, **M. Dutt**[†], and A. Bhattacharya, Finding a Largest Rectangle inside a Digital Object and Rectangularization. Journal of Computer and System Sciences, Elsevier (2017) (in press --- published online). (SCI Indexed) Impact Factor: 1.678.

2. **M. Dutt**[†] and A. Biswas, Boundary and Shape Complexity of a Digital Object, in Proceedings of the5[th]International Symposium Computational Modeling of Objects Presented in Images: Fundamentals, Methods, and Applications: CompIMAGE'16, Niagara Falls, New York, USA, LNCS 10149, pp. 105--117, Springer-Verlag, September 21--23, 2016.

3. **Barnali Gupta Banik**[†], Samir Kumar Bandyopadhyay , Image Steganography Using BitPlane Complexity Segmentation and Hessenberg QR Method,2016 International Conference on Intelligent Computing and Communication Vis Advances in Intelligent Systems and Computing, Volume 458, Edited by J. Mandal, S. Satapathy, M. Sanyal, V. Bhateja, Springer, Singapore DOI: 10.1007/978-981-10-2035-3_63.

4. **Subham Paul**[*] and **Debashis Chakraborty**[†], "Efficient Speech Compression Using Waveform Coding in Time Domain", Springer Nature Singapore Pte Ltd. 2018 N.R. Shetty et al. (eds.), Emerging Research in Computing, Information, Communication and Applications, pp 415-430.

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