



## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2024	M.TECH	IIT Kharagpur	7.98 / 10
2017	B TECH	Jawaharlal Nehru Technological University Anantapur	74.92%
2013	Board of Intermediate Education A.P	Sri Chaitanya Junior College Vijayawada	92.2%
2011	Board Of Secondary Education A.P	St Josephs Convent English Medium High School Proddatur	77.5%

## COURSEWORK INFORMATION

- *Machine Learning for Signal Processing*
- *Digital Image Processing*
- *Deep Learning Foundations and Applications*
- *Linear Algebra for Signals and Systems*
- *Artificial Intelligence Foundations and Applications*
- *Medical Image Analysis*
- *Probability and Random process*
- *Convex Optimization*
- *Digital Signal Processing*
- *Statistical Signal Processing*

## PROJECTS

M.Tech. Thesis Project | Dr. Debodoot Sheet [Jan 2023 to Present]  
*Virtual Staining for Histopathology using Physics Guided Adversarial Deep Learning*  
**Aim:** Design a Generative network to virtually stain a pathological unstained tissue image  
• Collecting the uncompressed pathological whole slide images through Brightfield & Autofluorescence Microscopy  
• Employing GANs for image to image transformation, enabling virtual staining of pathological images  
• Performed image transformation by using Pix2Pix generator and Patch GAN Discriminator on stain density mappings

Capstone Project | Subject: Digital Image Processing | Dr. Debodoot Sheet [Autumn 2022]  
*Adaptive Probability Filter for Removing Salt and Pepper Noises*  
**Description:**  
• Removing the Salt and pepper noises in an image by using an adaptive probability filter  
• The current pixel will be replaced by the median value by the probability of neighboring pixels distribution

Coursework Project | Subject: Bio-Medical Signal Processing | Dr. Nirmalya Ghosh [Autumn 2022]  
*Phonocardiogram (PCG) signal processing and Heart Sound Classification*  
**Description:**  
• Classification of PCG signal based on time domain and frequency domain features  
• By using Support Vector Machine (SVM) we classified normal and abnormal heart sounds

## SKILLS AND EXPERTISE

**Programming Languages:** Python | C++ | C | SQL  
**Software/IDE/Tools:** Matlab | Microsoft Office | Visual Studio Code | Jupyter Notebook  
**Digital Image Processing:** Image Segmentation | Image Filtering | Image Compression  
**Machine Learning:** Regression | Classification | Clustering | Data Preprocessing | Dimensionality Reduction  
**Deep Learning:** Convolutional Neural Networks | Auto Encoders | Generative Adversarial Networks

## WORK EXPERIENCES

*Senior Associate | Wipro [2017-2019]*  
• Worked as a Senior Associate in Wipro for a Google project  
• Cleared Project trainer position

## POSITIONS OF RESPONSIBILITY

*Teaching Assistant | Department of Electrical Engineering | IIT KGP*  
• Worked as Teaching Assistant for Signal Processing and System Design (EE69205) Laboratory for the Autumn semester 2023-24  
*Social Media Handler*  
• Currently working as a *Social Media Handler* for the *Student Activities Committee (SAC)* member at IEEE Signal Processing Society, *Student Branch Chapter, IIT Kharagpur*

## EXTRA CURRICULAR ACTIVITIES

*Technical Coordinator | EYE2k16 | Electrical Engineering | JNTUA*  
• Held the role of a technical coordinator for the EYE2k16 event and worked on the registration process for the event.  
• Designed videos for the event and promoted them through various events.