

Department of Data Science

Indian Institute of Technology Guwahati

Placement Brochure 2020-21



About the Institute

Since its inception in 1994 as the sixth 'Indian Institute of Technology', IIT Guwahati has achieved an international reputation in the fields of technology, innovation and research earning its accolades as one of the world's topmost young and dynamic universities with eleven departments and five inter-disciplinary academic centres covering all the major engineering disciplines. The faculty, besides committing to world class research, ensures that students of the campus are ready to face challenges of the professional world by providing them with a sound conceptual understanding of their respective disciplines. It also plays a huge role in their development as potential pioneers and leaders, by encouraging and helping them participate in different global ventures and ensuring a holistic development of the students. Students pursue internships in their vacations in industrial, managerial and research domains in leading multinational firms and research labs and contribute substantially to these organizations.







About the Programme

This is an unique M.Tech Programme started in the academic year 2019-20 and is jointly offered by three departments- Computer Science, Electrical & Electronics and Mathematics. The program focusses on building foundations with enough flexibility & diversity in modern scientific and technological innovations and thus accommodates students with diverse backgrounds. The curriculum is designed keeping in view the heavy demand from the industry in Data Science and the need to tackle the many fundamental and foundational research/problems arising in a rapidly evolving field and thus emphasizing on the foundational subjects and providing the in-depth knowledge which the discipline requires. This program opens up several new opportunities in science and engineering research.

More about the Program: https://www.iitg.ac.in/ds/

Administered by: Department of Computer Science, IIT Guwahati



Faculty In Charge

Dear Recruiters,

First of all, I will like to thank you for opting Indian Institute of Technology, Guwahati as a potential campus for recruitment this year. I am pleased to introduce the graduating maiden batch of our MTech in Data Science program from IIT Guwahati. The batch represents a unique interdisciplinary blend of young talent with rigorous training and high ambitions. I am sure that you will find our graduating students appropriate for the current openings in your organization. But moreover, I believe that these graduates will exceed your expectations.

- Dr Amit Awekar, Assistant Professor





Why Data Science?

Students achieving a GATE score of more than 99 percentile went through a competitive written test to get final offer for joining the course. Out of approximately 5000+ applications received by the institute the top 20 students were finally selected from diverse backgrounds and are provided with exposure to different discipline with dedicated and dynamic faculties from different specialization to work with for their thesis and train them into skilled human resources.

The graduates possess analytical, logical and problem solving skills to meet the pressing demands of the industry and contribute to modern and cutting edge research in the areas related to Data Science.



Course Structure

This is a 4 semester programme with two semesters devoted to thesis research. Students have the following course structure with provision to several labs and other relevant facilities across 3 departments to work out their thesis.

CORE COURSES

- Data Structures & Algorithms
- Databases
- Statistical foundations for Data Science
- Scientific Computing
- Matrix Computations
- Machine Learning
- Stochastic Models
- Optimization Techniques

ELECTIVE COURSES

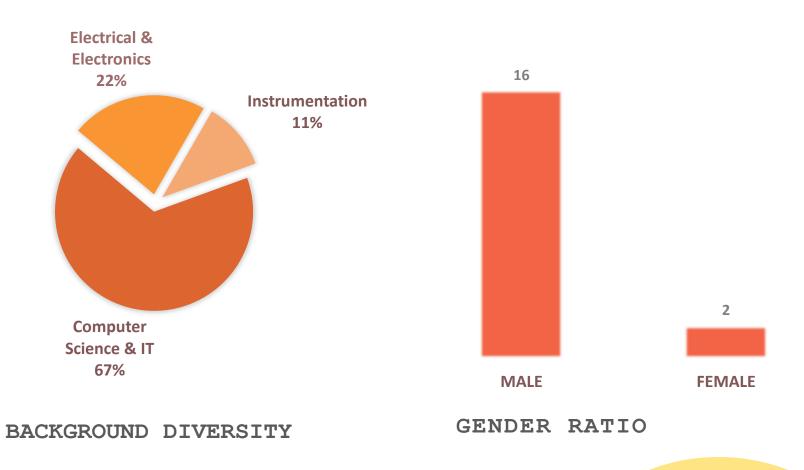
- Randomized Algorithms
- High Performance Computing
- Internet of Things
- Topics & Tools in Social Media Data Mining
- Speech Processing
- Computer Vision using Machine Learning
- Computer & Network Security
- Topics in Networks
- Automata, Logic and Games
- Introduction to parallel Computing
- Generalized Linear Models
- Graphs and Matrices

LAB COURSES

- Data structures & Databases lab
- Numerical Computations lab
- Machine Learning lab
- Python programming lab
- R programming lab
- Data Visualization lab



Demographics

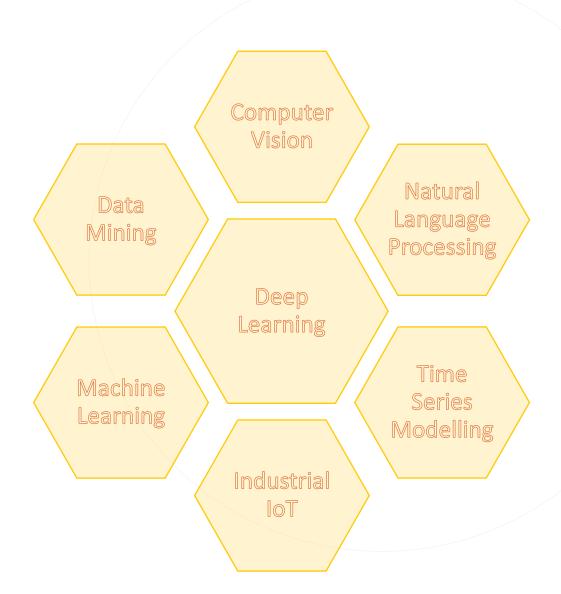




Active Research Work

The graduating students are actively involved in the below mentioned research topics:

- Industrial IoT
- Social Media Identity Mining
- Audio-Visual Speech Separation
- Large-Scale Function Optimization
- Multi-lingual Visual Question & Answering
- Fairness Constraint & Time Series Modelling
- Adversarial Perturbation Detection
- Personalized Medicine using Deep Learning
- Drift Compensation in Gas Sensors
- Low Power Architecture for Deep Learning





IIT GUWAHATI —

Batch Profile



Arunav Saikia, CSE Interest: Deep Learning, Machine Learning



Gagan Gayari, EIE
Interest: Hardware IP
Security



Hardik Kumar Prajapati, CSE Interest: Algorithm, Software Systems



Akshay Bawane, ECE Interest: Data Mining, Computer Vision



Jyotish Saikia, EIE
Interest: Speech
Processing, Deep
Learning



Harimohan Jha, CSE Interest: Machine Learning, Software Systems



B Monish Kumar, EEE Interest: Data Mining



Krishnavandhan Padhye, CSE Interest: VQA, NLP, Computer Vision



Interest: Deep Learning, Computer Vision



IIT GUWAHATI —

Batch Profile



Meghna Singh, CSE
Interest: NLP, Data
Mining, Machine
Learning



Rishabh Dhawan, IT
Interest: Machine Learning,
Deep Learning, NLP



Sandesh, CSE
Interest: Computational
Geometry, Machine
Learning



Priya Undirwade, CSE
Interest: Industrial IoT,
ML, Deep Learning &
Data Wrangling



Rohit Jain, CSE
Interest: Deep Learning,
Computer Vision, Software
Systems



Sodumu Devananda Reddy, ECE Interest: Deep Learning, Reinforcement Learning



Karna Rewatkar, CSE
Interest: Deep
Learning, Speech
Processing, Computer
Architecture



Sagar Kumar, ECE
Interest: Time Series
Modeling, Machine Learning
& Quants



Vajja Sai Kiran, CSE
Interest: Deep
Learning, Computer
Vision, Data Mining,
NLP, VQA



Students' Projects

Sophisticated real-world projects have been tailored by this year's graduating students. Few notable mention are:



Motion Deblur - Obtaining a Sharp image from a blurred image



Transliteration of Text Images



Contact Us



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