



EDUCATION

| Year | Degree/Exam | Institute | CGPA/Marks |
|------|-------------|----------------------------|------------|
| 2020 | B.TECH | IIT Kharagpur | 9.46 / 10 |
| 2016 | CBSE | DAV Kapildev Public School | 95.4% |
| 2014 | CBSE | Radha Govind School | 10 / 10 |

INTERSHIPS

Personal Robotics Lab, University of Washington (May '18 to July '18)

Guide: Prof. Siddhartha Srinivasa (CSE, UW)

Topic: Learning Roadmaps for Robot Motion Planning

Research Areas: Deep Learning, Conditional Variational AutoEncoders, Graph Space Planning, Narrow Passages and Constrained Space Problems

PROJECTS

Kharagpur RoboSoccer Students' Group, IIT Kharagpur

Supervisor: Prof. Jayanta Mukhopadhyay (CSE, IIT KGP)

- Implemented path planning algorithms and Finite State Machines (FSM) Architecture for RoboCup Small Size League Robots.

- Designed a simulator for robots using PyQt

Research Areas: Multi-agent systems, motion planning, robot soccer

Messenger Bot | Kharagpur Winter of Code 2017

- Designed an Assistive bot in Python that uses Flask to build a webhook for Facebook's Messenger Bot API.

- Integrated third party APIs for railway schedules and google search services.

Shopping Mall Management System

Guide: Prof. Sudip Misra (CSE, IIT KGP)

Term Project: Developed an object orientated system using Java to provide an online management platform for mall admin, shop owners and customers, easing their services and requests.

COMPETITION/CONFERENCE

IBM Blockchain Hackathon

- Secured 3rd position in the national level hackathon organized at Kshitij, 2018

- Designed an application on digital certificates using blockchain technology to avoid forgery and speed up the verification process

RoboCup 2018

- Qualified for SSL, RoboCup 2018 among top 24 Teams across the globe.

SKILLS AND EXPERTISE

Languages: C, C++, Java, Python, Octave

Software and Libraries: Git, OpenCV, PyQt

Machine Learning: Tensorflow, Pytorch

COURSEWORK INFORMATION

Computer Architecture*, Compilers*, Knowledge Modelling and Semantic Technologies*, Probability and Statistics, Algorithms#, Software Engineering#, Discrete Structures, Formal Language and Automata Theory

*: Ongoing, #: Theory and Laboratory

AWARDS AND ACHIEVEMENTS

KVPY Fellowship

Secured an All India Rank 9 in Kishore Vaigyanik Protsahan Yojana Examination in SX stream

IIT JEE 2016

Secured an All India Rank 266 in JEE Advanced 2016

NSEA 2015-16

Was among the top 30 students selected for Indian National Astronomy Olympiad from Jharkhand.

POSITIONS OF RESPONSIBILITY

Instructor (MIT-IIT Robotics Workshop , May 2017)

- Conducted a fortnight long Robotics workshop for high school students.

- Introduced basics of C, C++, Processing and their applications in the field of robotics.

IEEE Robotics Winter Workshop , IIT Kharagpur (Dec 2018)

Image Processing Mentor

Conducted a week-long workshop for first and second year undergraduates at IIT Kharagpur. I taught basic Image Processing using OpenCV and C++.

EXTRA CURRICULAR ACTIVITIES

- Executive Head, Kharagpur Open Source Society, IIT KGP

- Organised a game theory based event during Kshitij, 2018 that witnessed participation of students from various colleges

- Mentor for first years at Student Welfare Group, IIT Kharagpur