Mukul Mehta

Sophomore @ Computer Science and Enginnering, IIT Kharagpur

FDUCATION

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

B.Tech in Computer SCIENCE AND ENGINEERING CGPA: 8.83/10 2018-2022 | West Bengal, India

INTEREST AREAS

I'm an aspiring developer who's always looking out for interesting technical challenges. I'm intrigued by the idea of creating software and understanding how real world systems work.

I'm mainly interested in Backend engineering and designing systems/databases.

I'm exploring areas of Distributed Systems, Computer Networks and Data Mining and I wish to pursue research in these areas.

CONTACT

RK HALL. IIT KHARAGPUR, **WEST BENGAL - 721302** PHONE: +91-76783 81645

LINKS

- mukul-mehta.github.io
- nukul-mehta
- in mukul-mehta12

COURSEWORK

T - Theory | L - Laboratory

COMPLETED

Programming & Data Structures (T/L) Discrete Structures (T) Algorithms-1 (T/L)

ONGOING

Software Engineering (T/L) Formal Logic & Automata Theory (T) Switching Circuits & Logic Design (T/L) High Perf. Scientific Computing (T)

ONLINE COURSES

Machine Learning - Andrew Ng ML - Coding Blocks (Ongoing)

PROJECTS

RETROSPECTIVE ACCESS MANAGEMENT IN ONLINE ARCHIVES Under Prof. Mainack Mondal

- Investigating the effectiveness of tools which enable users to retrospectively modify privacy settings (Social Media or Cloud Storage).
- Working on large-scale extraction of privacy settings & profile data from Twitter & Instagram to analyse patterns in privacy settings over time.

IIT TECHNOLOGY AMBIT BACKEND DEVELOPER

Jun 2019 - Present

- IIT Technology Ambit is a tech magazine that covers innovation in tech across the IIT's, funded by the Dean, Sponsored Research and Industrial Consultancy, IIT Kharagpur.
- Part of a team building a REST based backend from scratch. I worked on writing DB Models, API Endpoints and unit tests.
- The REST Structure was built using Flask-RESTPlus and used other frameworks such as Flask-Login and Sendgrid API for mailing.

PATH PLANNING AND KALMAN FILTER AGV TASK ROUND

- Optimized multiple data structures and pathfinding algorithms(Dijkstra and A*) to find a solution for a given maze, with multiple constraints towards emulating a real car. Implemented in C++ using OpenCV.
- Implemented Kalman Filter for estimation and verification of uncertain observations by using Numpy, Matplotlib and OpenCV.

TECHNICAL SKILLS

Programming Languages Libraries / Frameworks Databases Systems / Platforms

C | C++ | Python | JavaScript | GNU Octave (Familiar) Flask | Selenium | OpenCV | Numpy | sklearn | Snap.py SQLAlchemy | MySQL | SQLite | MongoDB Git | Linux | Docker (Familiar) | Heroku | Nginx Web Technologies | HTML+CSS | REST | BeautifulSoup | Express (Familiar)

SCHOLASTIC ACHIEVEMENTS

- Aditya Birla Scholarship: Among the top 35 students in the country and the 4 from IIT KGP to be nominated for the interviews in 2018.
- JEE Advanced AIR 215: Under top 0.15% amongst more than 2.00.000 students
- JEE Main AIR 1584: In top 0.15% amongst more than 12,00,000 students.

ACTIVITIES & LEADERSHIP

- Core Team Member, Kharagpur Open Source Society: Responsible for the smooth conduct of events to familiarize students with open source technologies and philosophy.
- Open Source Involvement: Part of gold-winning OpenSoft team of my hall(Project Litigator). Worked on multiple projects, hosted on GitHub.
- Tech Team, Gymkhana IIT Kharagpur Part of a team that is responsible for maintaining backend, student's grievance portal etc, headed by the highest nominated technical position of the institute.