

NAVANEETH SURESH

IIT Kharagpur, West Bengal, India

+91 828 116 9538 [◇ navaneeth@iitkgp.ac.in](mailto:navaneeth@iitkgp.ac.in)

GitHub: <https://github.com/themousepotato/>

EDUCATION

Indian Institute of Technology, Kharagpur

Kharagpur, West Bengal, India

B.Tech + M.Tech in Ocean Engineering (Majors) and Computer Science and Engineering (Minors)

EXPERIENCE

Google Summer of Code 2019

Remote

Student Developer

May 2019 - August 2019

Completion Certificate[\[link\]](#)

- Was selected as an intern in Google Summer of Code under Python Software Foundation and worked under the guidance of Pulkit Goyal.
- Developed a method to interactively restore uncommitted changes to the working directory and worked on adding a functionality to store/restore partially resolved merge conflicts in the Mercurial version control system.
- Contributions to the repository[\[link\]](#).

Kharagpur Open Source Society

Kharagpur, West Bengal

Executive Head

January 2017 - Present

- Organized Kharagpur Winter of Code[\[link\]](#), to promote open-source development with over 2000+ registrations, across more than 75 colleges.
- Curated the contents and taught in interactive Python and Git workshops.
- Conducted Ubuntu install fest and the Open Source summit 2018 with more than 700+ registrations.

CONFERENCES

Talk: Storing unresolved merge conflicts using Mercurial

Mercurial Sprint 5.2, New York

PROJECTS

Monocular 3D Object Detection

Ongoing

- Advisor: Rishabh Madan
- Working on 3D object detection on monocular images using knowledge distillation techniques.
- Used Sparsely Embedded Convolutional Detection Network to train a ResNet which is trained and tested on KITTI dataset.

ROS Apps deployment

- Investigated on deploying Robotic Operating System applications using containers.
- Used Docker for deployment.
- Study is documented at <https://github.com/themousepotato/ROSAppsDeployment>.

Where Is My Prof

- Scraped the schedule of the courses offered by various departments and mapped to the professors to generate the timetable of a professor from the ERP of IIT Kharagpur.
- Wrote the backend using Flask, BeautifulSoup, mechanize, etc in Python and frontend using HTML5 and CSS3 completely from scratch.
- Deployed as a web application on <https://wimp.metakgp.org/> and code is hosted at <https://github.com/metakgp/wimp/>.

TECHNICAL SKILLS

Languages	C, C++, Python, Matlab/Octave, JavaScript, Bash, L ^A T _E X, HTML5, CSS3
Libraries	Pytorch, Tensorflow, Keras, Numpy, Flask
Databases	SQL, MongoDB
Version Control	Git, Mercurial, GitHub Workflow
Deployment	Docker, Heroku

RELEVANT COURSES

- Machine Learning
- Convolutional Neural Networks for Visual Recognition*
- Programming and Data Structures
- Design and Analysis of Algorithms
- Numerical Solution of Ordinary and Partial Differential Equations

* indicates online courses

AWARDS

Gold in Interhall Opensoft Competition

Kharagpur, West Bengal

[Link to the repository](#)

- Worked on developing an app which intelligently parses different parts of a doctor's prescription (written by hand) using multiple technologies such as OpenCV, Flask, NLP, REST API, bash scripting and Docker.
- Used Tesseract OCR for character recognition.
- Worked on implementing and enhancing spell correction using Norvig's algorithm on custom corpus of drug names.

Gold in Open IIT Data Analytics Competition

Kharagpur, West Bengal

- Worked on developing a mathematical model based on reducing wastage and safety stock and relying on rather ordering when needed.
- Used Time Series Forecasting using Exponential Smoothing, Economic Order Quantity Model and Just in time inventory strategy policy.

Singapore Technologies Scholarship in Engineering

Kharagpur, West Bengal

- Was shortlisted for the Singapore Technologies Scholarship in Engineering on the basis of academic and extra-curricular activities.