

Abhishek Pachorkar

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EDUCATION

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
MATHEMATICS AND COMPUTING
CGPA: 8.50/10

2018-2023 | West Bengal, India

MAHARASHTRA STATE BOARD OF SECONDARY EDUCATION
HIGHER SECONDARY EDUCATION
CERTIFICATE EXAMINATION
Percentage: 85.08%

May 2018 | Nasik, Maharashtra, India

MAHARASHTRA STATE BOARD OF SECONDARY EDUCATION
SECONDARY SCHOOL
CERTIFICATE EXAMINATION
Percentage: 94.40%
May 2016 | Nasik, Maharashtra, India

TECHNICAL SKILLS

Programming Languages

C | C++ | Python | Java | Ruby

Libraries / Frameworks

OpenCV | Numpy | Flask | Django | Rails

Systems and Platforms

Git | Linux | ROS | Solidworks

Others

HTML | CSS | MySQL | Postgres

COURSEWORK

T - Theory | L - Laboratory

COMPLETED

Programming & Data Structures (T/L)

Design & Analysis of Algorithm (T/L)

Discrete Mathematics (T)

Educational Data Analytics

ONGOING

Computer Organisation & Architecture (T/L)

Object Oriented System Designs (T/L)

ONLINE COURSES

Machine Learning - Andrew Ng

Algorithms Specialization (Ongoing)

deeplearning.ai (Ongoing)

PROJECTS

SHOWMAN SOFTWARE ENGINEERING INTERN

April 2020 - May 2020

- Handled optimized distribution of video content using AWS's CloudFront CDN and a Load Balancer to distribute requests made.
- Built APIs using Ruby on Rails for adding Elastic-search into the backend, Also integrated Twilio's SMS API for authentication.

SYNCHEM PHARMACEUTICALS BACKEND DEVELOPMENT INTERN

June 2020 - August 2020

- Built an inventory management system with double accounting from scratch while working closely with CTO
- Used Django REST Framework, Elasticsearch, MySQL, and Redis. For handling tasks asynchronously, designed and implemented a task queue handler derived from Celery.

NEXUS KSHITIJ 2020 CHALLENGE

- Problem Statement:* Use a monocular camera to guide a bot through grey-scale environment.
- Executed different approaches using Python-OpenCV functions to extract exact path boundaries including implementing generalized Huff Transform and contour detection using gradients and guide the bot to destination.

PATH PLANNING USING RRT* ALGORITHM ARK TASK ROUND

- Optimized multiple data structures and path-finding algorithms such as RRT*(Rapidly-exploring random trees) to find a solution for a given dynamic maze with moving obstacles in random motion. Implemented it in C++ using OpenCV.
- Developed a new algorithm to plot disparity map of two stereo images and applied it to plot depth gradients.

BEATCOVID

- Built a tool to efficiently match medical supplies to hospitals that need them the most by considering the distance, town population, and other heuristics.
- The app, built with Flask and MySQL allowed hospitals to list essential supplies they need urgently and government factories to arrange for them rapidly in COVID-19 pandemic.

SCHOLASTIC ACHIEVEMENTS

- JEE Advanced AIR 3359: Under top 1% amongst more than 2,00,000 students
- JEE Main AIR 249: In top 0.02% amongst more than 12,00,000 students.
- Mentored in IEEE certified workshop for image processing
- Secured best algorithm award in Nexus event at Kshitij 2020