

Rutvij Menavlikar

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EDUCATION

IIIT HYDERABAD

B.TECH AND MS DUAL DEGREE IN
COMPUTER SCIENCE AND
ENGINEERING
July 2019 - Present
CGPA: 8.71/10

LINKS

Github:// [Rutvij-1](#)
Codeforces:// [menavlikar.rutvij](#)

ACHIEVEMENTS

- Won the Quantum Chemistry Challenge in Qhack 22 sponsored by Qunsys.
- Selected in IOITC (2017)
- Ranked #62 in the 2020 ICPC Asia Gwalior-Pune Regional Contest.
- Top 10 in Uber Hacktag 2.0 2022.
- Ranked #306 in Google Kickstart 2022 Round C.

TECHNICAL SKILLS

LANGUAGES & FRAMEWORKS

Day-to-Day:
Python • C/C++ • JavaScript • React
Familiar:
LaTeX • HTML/CSS • Qiskit • React Native • Bash • Solidity • Racket • Mapbox JS

MISCELLANEOUS

MySQL • MongoDB • Git

RELEVANT COURSES

Machine Data and Learning,
Distributing Trust and Blockchain,
Statistical Methods of Artificial Intelligence,
Operating Systems and Networking,
Software Systems, Data and Applications,
Quantum Algorithms

MAJOR PROJECTS

WEB DEV AND DATA SCIENCE | NETCITY

- Cleaning and processing the data from the dataset for a city, then finding methods to predict the likelihood of failure of a pipeline using spatial data of the pipes, and surrounding factors for a city.

PAULIZ | QHACK 22

- Simulated the Hamiltonian of the Heisenberg Spin Chain model using topologically optimized Trotterisation.
- Won the Quantum Chemistry Challenge in Qhack 22 for this project.

DAPP MARKET | AUCTION-HOUSE

- A webapp for an online Auction House with proper payment and delivery system.
- Includes integration with Solidity back-end and truffle-react.

FOOD DELIVERY APP | A SENIOR IS ASKING

- An application for food delivery by students and for students developed using React JS, Flask, Redis, Docker and REST APIs.

LINUX SHELL | SEASHELL

- A Bash-like shell in C using Linux system calls.
- Included piping, redirection and signal handling.

EXPERIENCE

SMARTTERRA | ML INTERN

June 2021 – July 2021

- Worked on project Netcity, to build a ML model that could predict leakage in a pipeline given relevant data.
- Worked with jupyter notebooks, geopandas library, React native, Mapbox JS and Plotly JS.

QINTERN | QISKIT CONTRIBUTION

July 2022 – Present

- Project 19 of the Qintern 22 programme.
- Reviewing the existing implementations of Multi-controlled NOT gate, implementing them using the qiskit framework, and at the top of it and writing a wrapper that chooses the best implementation given the size of the gate and the pre-specified resources allowed.

POSITION OF RESPONSIBILITY

IIIT PROGRAMMING CLUB | MODERATOR

July 2021 – June 2022

- Co-heading the club and in-charge of hosting and organizing events like Fools Programming and Decode. Responsible for club operations.

TEACHING ASSISTANT

- **Discrete Structures:** December 2021 - March 2022
- **Data Structures and Algorithms:** March 2022 - Present