

Rutvij Menavlikar

rutvij.menavlikar@research.iiit.ac.in
menavlikarrutvij@gmail.com

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](#)

(Maximum rating 2015, *Candidate Master*)

ACHIEVEMENTS

- Won the Quantum Chemistry Challenge in Qhack 22 sponsored by Qunasy.
- Selected in International Institute of Informatics Training Camp (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

ML RESEARCH | NETCITY

- 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 Neticity, 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.

QUANTUM WALKS | RESEARCH

June 2021 – Present

- Currently working on bounding mixing time of quantum walks on a physically realizable graph under Prof. Shantanav Chakraborty in CQST, IIIT Hyderabad.

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, Decode and Codecraft. Responsible for club operations.

TEACHING ASSISTANT

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