

Rakshit P

+91-9606163623 | rakshit.191cs147@nitk.edu.in | linkedin.com/in/rakshit-p | github.com/rakki-18

Education

National Institute of Technology Karnataka

Bachelor of Technology in Computer Science and Engineering

• CGPA: **9.59/10.00** • Rank: **2/126** (As of Aug'22)

Surathkal, India

July'19 – May'23(*expected*)

Experience

Google India

Software Engineering Intern

Hyderabad, India

May 2022 – Jul 2022

- Worked with the cloud BackupDR team on designing and implementing an innovative automated test framework
- Proposed and implemented novel recursive algorithms in **Java** to solve output validation, to add missing input fields and to parameterize inputs.
- Analysed working of complete backup use case and all operations supported by the service, by collaborating with the UDP team. Completed stretch goal of integrating backup functional tests to the framework.
- Achieved an increase in code coverage from **8% to 50%** from tests written using the framework.

Retrera (now Blaze)

Software Engineer

Remote, San Fransisco

Nov 2021 – Jan 2022

- Worked as an early developer and helped in getting YCombinator funding
- Implemented modules using **Django, React and GraphQL**, designed UI and wrote recommendation algorithms

Google Summer of Code

Student Developer

Pharo Consortium

May 2021 – Aug 2021

- Benchmarked the matrix implementations in the Pharo language by comparing run-time and space efficiency
- Built a User-Interface for running the benchmarks, and added missing functionalities to the language

IAS Summer Research Fellow

Research Intern — Supervisor: Dr. Jayaprakash

IISc, Bangalore

May 2021 – July 2021

- Designed efficient 2D iterative reconstruction algorithms to reduce cross-talk between absorption and scattering coefficients values of a tissue while estimating them using inverse Photoacoustic Tomography imaging modality
- Proposed a novel method of taking logarithms of energy distribution values to provide numerical stability

Selected Projects

Modeling and Controlling Epidemic Outbreaks

IEEE NITK Student Branch

- Led a team of 7 in comparing AI and deterministic algorithms to solve NP hard problem of vaccine allocation
- Formulated the project idea by reading research papers, collaborated with university professors, assigned tasks to team members and ensured successful completion of the project. [Video Link](#)

Publication

State of the Art Matrix Benchmarking– Rakshit P, Hernan Morales Durand

Selected and sponsored to give a talk and present poster in Pharo Days conference in Lille, France. [Poster](#)

Relevant Courses and Skills

Languages: C, C++, Python, Java, HTML/CSS, Smalltalk, MATLAB

Technologies: Git, SQL, Django, TensorFlow, NumPy, OpenCV, Junit, React, Flask, AWS Lambda, Jupyter Notebook

Courses: Data Structures and Algorithms, Machine Learning, Computer Networks, Operating Systems, Database Systems, Cryptography, Software Engineering, Linear Algebra, Discrete Mathematical Structures

Achievements and Activities

- **MLH Hackathon** winner in Prehackstoric hacks for the project [Dinocord](#)
- Ranked **71** out of 7000 teams in **ACM ICPC Amritapuri Regionals 2020** preliminary and selected for regionals
- Awarded **IAS Research Fellowship** and **KVPY** Scholarship [**AIR 1024** out of 50k applicants]
- Reached **Candidate Master** (Max. Rating: 1925) on [codeforces](#) and Max Rating of **2033** on [codechef](#)
- **Open Source contributor** at [Google Jax](#), [Microsoft LightGBM](#), [PolyMath](#), and [Pharo](#)