Rohan Yogesh Deshpande

+19174984648 • Princeton, NJ • rohandeshpande832@gmail.com • https://rohan2002.github.io/ • https://github.com/Rohan2002

Education

RUTGERS UNIVERSITY New Brunswick, NJ
Bachelor of Science, Major in Computer Science, Minor in Mathematics September 2020 - May 2024
GPA: 3.69 / 4.0 (Graduated *cum laude* with Computer Science Honors)
Awards: Dean's List, Alan Marc Schreiber Memorial Scholarship for **Excellence** in **Mathematics**
Relevant Coursework: Operating System Design, Computer Security, Design and Analysis of Algorithms, Systems Programming, Numerical Analysis, Software Methodologies, Data Structures, Linear Algebra, Scientific and Technical Writing.

Skills

Languages: C/C++, Python, Java, Clojure, HTML/CSS, Typescript/Javascript
Spoken Languages: English (Proficient), Hindi (Proficient), Marathi (Proficient), Japanese (Intermediate)
Technologies: Git, Infrastructure (Docker, Kubernetes, KEDA, REST API, gRPC, Protocol Buffers), Web (React.js, Next.js, Node.js, Django, Flask), Cloud (Azure, AWS), Storage (Redis, PostgreSQL, MySQL, MongoDB), OpenCV, Numpy, Pandas, JavaFX
Work Authorization: India, Japan, United States of America

Experience (3+ Years of Experience)

KPMG IGNITION TOKYO (KPMG JAPAN) Tokyo, Japan
Software Engineer Intern May 2022 - August 2023

- Led and developed file comparison software with **48%** higher accuracy and **60%** faster processing than Adobe's solution.
- Led a **95%** reduction in application security bugs by enforcing secure coding practices and upgrading Python with 100+ dependencies.
- Achieved **30-50%** faster audit processing by implementing a distributed cache service **(Python)**, boosting auditor efficiency.
- Enhanced financial auditing accuracy by **35%** using patented **Python** algorithms, optimizing PDF data extraction.
- Tested **100+** REST API endpoints by developing a **Clojure**-based property testing framework under tight deadlines.
- Streamlined **Azure** deployments with systematic **CI/CD** pipelines, **Kubernetes** configurations, and refined **SDLC** measures.
- Improved divisional transparency by hosting **20+** company-wide knowledge-sharing sessions, engaging over **70%** of staff.

SHUMYATSKY LAB (RUTGERS - DEPARTMENT OF GENETICS) New Jersey, USA
Research Assistant May 2021 - May 2022

- Reduced **Optogenetics** experiment time by **83%** through developing **Python** software to automate the experimental process.
- Automated **60+** hours of video analysis by implementing **machine learning** pipelines using **DeepLabCut** and **EzTrack**.
- Achieved a **93%** cost reduction by creating an in-house **Arduino**-based device to replace the existing TTL pulse generator.

WHIZ.AI New Jersey, USA
Software Engineer Intern November 2021 - January 2022

- Optimized back-end functionality **(Python, Flask)** to support **language models** resulting in a **30% decrease** in API latency.
- Developed and onboarded the entire team to utilize **Python** tool for streamlined **database** migrations with **Alembic** API.

HEALCO INC. New Jersey, USA
Fullstack Engineer Intern May 2020 - February 2021

- Built HealCo's press release web app **(Next.js, Express.js)** with identity access management, press sharing, and administrative features.
- Created a scalable, and cost-effective **AWS Fargate-based DevOps** system and **CI/CD** pipeline for all HealCo apps.
- Rapidly created and deployed web application features for hospitals to lease medical spaces during the **COVID-19** pandemic.
- Integrated **Stripe** into the web application **(React, Koa.js)** to enable payments by ACH debits and credit cards.

Featured Projects

PYPODS **- Python Dependency Isolation Framework**

- **Python** library to execute **Python** dependencies in an isolated fashion enhancing modularity of monolithic codebases.

CONCURRENT WORD WRAPPER **- Word Wrapping Library:**

- **C** library to format (word wrap) files in multiple directories and subdirectories concurrently.

IFEVAL **- Large Language Model (LLM) Response Evaluation Framework:**

- **Clojure** library to evaluate responses from LLM, based on the work of **Google** and **Yale University.**

OS **- Operating System Components:**

- **C** libraries for **POSIX** thread emulation, virtual memory management, and **FUSE**-based file systems.