Rohan Yogesh Deshpande

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Education

RUTGERS UNIVERSITY New Brunswick, NJ
Bachelor of Science, Major in Computer Science, Minor in Mathematics Expected: May 2024
GPA: 3.7 / 4.0
Awards: Dean's List, and Alan Marc Schreiber Memorial Scholarship for **Excellence** in **Mathematics**.
Relevant Coursework: Operating System Design, Computer Security, Design and Analysis of Algorithms, Systems Programming, Software Methodologies, Data Structures and Algorithms, Linear Algebra, Scientific and Technical Writing.

Skills

Languages: Python, C, Java, Clojure, HTML/CSS, Typescript/Javascript
Spoken Languages: English (Native), Hindi (Native), Marathi (Native), Japanese (Proficient)
Technologies: Git, Docker, Kubernetes, KEDA, REST API, gRPC, Operating System Design, Redis, Node.js, React.js, Django, Flask, Protocol Buffers, Azure Cloud, AWS Technologies, Microservices, PostgreSQL, MySQL, MongoDB
Work Authorization: India, Japan, United States of America

Experience (3 Years of Total Experience)

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

- Led development of end-to-end file comparison software **(Python, Django)**, increasing accuracy by **48%** and reducing processing time by **60%** compared to **Adobe's** file comparison solution.
- Increased financial auditing application performance by **30-50%** by implementing application-level caching.
- Enhanced financial auditing accuracy by developing patented algorithms in **Python** that improved data extraction from PDFs.
- Improved system elasticity with event-driven autoscaling using **KEDA**, dynamically adjusting resources based on real-time metrics.
- Sped up deployment by automating security checks **(CodeQL, Qualys)** that streamlined security bug resolution.
- Introduced property-based testing framework in **Clojure** for testing **REST** APIs, driving initial adoption across the company.
- Extensively managed production deployments with **Azure** Log Analytics, Kubernetes Services, and Firewall configurations.
- **Technologies:** Django, Python, Clojure, Automated Testing, Kubernetes, KEDA, Distributed Systems, Docker, Microservices

RUTGERS UNIVERSITY, DEPARTMENT OF GENETICS New Jersey, USA
Research Assistant May 2021 - May 2022

- Developed software using **Python**, **OpenCV, and Arduino** enabling Neuroscientists to automatically conduct and record **real-time** Optogenetics experiments.
- Developed software using **Python, FFMPEG, and OpenCV** to label video frames for training computer vision models.
- **Technologies:** Python, OpenCV, FFMPEG, Arduino, Statistical Data Analysis

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

- Developed efficient back-end functionality to support **language models** using **Python**, **and Flask** resulting in a **30% decrease** in API latency.
- Increased the efficiency of engineers by integrating and documenting **Alembic** for easier database migrations.
- **Technologies:** Python, Databases, Flask, REST APIs, Language Models, Microservices

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

- Architected, developed, and deployed HealCo's press release web app with robust identity access management, press sharing functionality, and administrative features.
- Built a scalable, and cost-effective **AWS Fargate-based** DevOps system and CI/CD pipeline for all HealCo apps.
- Integrated **Stripe** into the web application to enable payments by ACH debits and credit cards.
- **Technologies:** AWS, Node.js, Next.js, React.js, Typescript, Javascript, MySQL, PostgreSQL, Docker, Microservices

Featured Projects

GOOD EATS - Full-Stack Nutrition App:

- Developed a web application using **React** and **Node.js** for users to obtain nutritional information from food images.

CONCURRENT WORD WRAPPER - Word Wrapping Library:

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

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

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