

# Rohan Yogesh Deshpande

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## Education

### RUTGERS UNIVERSITY

New Brunswick, NJ

Bachelor of Science, Major in Computer Science, Minor in Mathematics

2020 - 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, Software Methodologies, Data Structures and Algorithms, Linear Algebra, Scientific and Technical Writing.

## Skills

**Languages:** Python (Proficient), C (Proficient), Java (Proficient), Clojure (Intermediate), HTML/CSS (Proficient), Typescript/Javascript (Intermediate)

**Spoken Languages:** English (Proficient), Hindi (Proficient), Marathi (Proficient), Japanese (Intermediate)

**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

### KPMG IGNITION TOKYO (KPMG JAPAN)

Tokyo, Japan

#### Software Engineer Intern

May 2022 - August 2023

- Led development of end-to-end file comparison software (**Python, Django, React.js**), increasing accuracy by **48%** and reducing processing time by **60%**.
- Developed front-end (**React.js**), and back-end (**Django, PostgreSQL**) features of a major financial auditing platform.
- 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 live metrics.
- Reduced financial auditing application API latency by **30-50%** through application-level caching implementation.
- Sped up deployment by automating security checks (**CodeQL, Qualys**) that streamlined security bug resolution.
- Extensively managed production deployments with **Azure** Log Analytics, Kubernetes Services, and Firewall configurations.
- Created a property-based testing framework in **Clojure** for testing **REST APIs**, driving initial adoption across the company.
- **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

- Developed HealCo's press release web app with robust identity access management, press sharing functionality, and administrative features using **NextJS, TypeScript, PostgreSQL, Twilio, SendGrid, and Stripe**.
- 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 (**React, Koa.js**) 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 subdirectories 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**.