# Rohan Yogesh Deshpande

+19174984648 • Princeton, New Jersey • rohandeshpande832@gmail.com • https://rohan2002.github.jo/

### **Education**

**RUTGERS UNIVERSITY** New Brunswick, NJ Expected: May 2024

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

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, C. Java, Cloiure, 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 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% by implementing application-level caching.
- Sped up deployment by automating security checks (CodeOL, Qualvs) 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, PostgreSOL, 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 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.