# SWANAND KHONDE

linkedin.com/swanandkhonde | swanandkhonde1999@gmail.com | portfolio | +1 832-907-3091

#### **EDUCATION**

**Rice University** August 2023 - December 2024

Master of Computer Science Houston, USA

August 2017 - June 2021 Vishwakarma Institute of Technology

Bachelor of Technology, Computer Engineering Pune, India

## **EXPERIENCE**

Nedd Technologies - Software Engineer Intern

May 2024 - August 2024

Python, Flask, Azure, React, Javascript, PostgreSQL

Houston, USA

- Leading the ESG Platform development from conception to launch, owning Flask-based RESTful services.
- Developing a responsive and user-friendly **Next.js** User Interface, enhancing the overall user experience.
- Designing and implementing a data model and data transformations for accurate and insightful sustainability reporting.
- Utilizing Azure DevOps to implement CI/CD pipelines and deployment strategies, significantly improving development efficiency and product reliability.

#### HSBC Technology India - Software Engineer

August 2021 - June 2023

Python, Java, Spring Boot, React, Oracle DB, Load Trade, Ansible, Grafana, Unix

Pune, India

- Led the development of Load Trade Archive Service, a microservice-based platform for Bloomberg's Load Trade production instance, enabled direct user access to XML and CSV trade files through a UI with different filters, reducing weekly IT team search time by 30 minutes per member and significantly improving data accessibility and organization.
- Developed REST APIs with Flask and a React frontend for the Load Trade Archive Service, deployed on an on-premise production server.
- Conducted requirements gathering and feedback sessions with business users, creating a UI that streamlined access to trade files and improved data retrieval efficiency by ~50%.
- Received the Star Performer Award from HSBC in Q1 2023 for the Load Trade Archive Service project, an honor awarded to only 20 individuals' organization-wide for exceptional performance.
- Implemented and deployed Log Dream, a logging solution with a user interface that simplified error tracking for production issues across 4 different services, reducing log review time by ~60%.
- Created a Python-based CR Checker Plugin for Ansible Tower, automating pre-deployment verification of Change Requests, enhancing compliance and reducing deployment errors.
- Developed a Spring Boot service with a REST API endpoint for Kubernetes deployments via Jenkins, integrating with ServiceNow for automated Change Request verification, ensuring compliance before production deployments.

## Optimum Data Analytics - Machine Learning Engineer Intern

August 2019 - Jan 2020

Python, Flask, Ludwig, Tensorflow, MySQL

Pune, India

Conceptualized and led **Document Classification using Visual Parameters**, a deep learning project, achieving a robust classification model with 95.7% training accuracy and 83% test accuracy using a CNN framework.

#### ACADEMIC PROJECTS

# Empirical Analysis of Fine-tuning Image Captioning Model on Synthetic Data Hugging Face, Python, Pytorch

January 2024 - May 2024

Rice University

- Led a pioneering research initiative at Rice University to empirically analyze the effects of training **image captioning** models using synthetic data.
- fine-tuned the BLIP model on a blend of synthetic, semi-synthetic, and real data, enhancing understanding of model resilience against data quality degradation.

### Social Networking Platform:

August 2023 - December 2023

Rice University

Javascript, React, Node.js, HTML, CSS

Engineered and deployed **RiceBook**, a scalable social media web application, leveraging the **MERN** stack, integrated testdriven development practices, version control, and advanced web design patterns to enhance front-end and back-end functionalities.

#### TECHNICAL SKILLS

Python, Java, Javascript, Typescript, SQL Languages Frameworks Spring Boot, Node.js, React, Flask, PyTorch

Other SQL, MongoDB, Azure, Ansible, Service Now, Grafana, Power Bi, Jenkins, CI/CD, Unix