

SWANAND KHONDE

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EDUCATION

Rice University

Master of Computer Science

August 2023 - December 2024

Houston, USA

Vishwakarma Institute of Technology

Bachelor of Technology, Computer Engineering

August 2017 - June 2021

Pune, India

EXPERIENCE

Nedd Technologies - Software Engineer Intern

Python, Flask, Azure, React, Javascript, PostgreSQL

May 2024 – August 2024

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

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

August 2021 – June 2023

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

Python, Flask, Ludwig, Tensorflow, MySQL

August 2019 – Jan 2020

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

Javascript, React, Node.js, HTML, CSS

August 2023 - December 2023

Rice University

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

TECHNICAL SKILLS

Languages

Python, Java, Javascript, Typescript, SQL

Frameworks

Spring Boot, Node.js, React, Flask, PyTorch

Other

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