

# SWANAND SANJAY KHONDE

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## EDUCATION

### RICE UNIVERSITY

Master in Computer Science

GPA: 3.89 / 4.0

Coursework: Design and Analysis of Algorithms, Web Development, Parallel Computing, Machine Learning with Graphs

Graduate Teaching Assistant – Computer Security

Houston, TX

08/23 - 12/24

### VISHWAKARMA INSTITUTE OF TECHNOLOGY PUNE

Bachelor of Technology in Computer Engineering

GPA: 8.93 / 10

Coursework: Data Structures and Algorithms, Operating Systems, Machine Learning, Artificial Intelligence.

Pune, India

08/17 - 06/21

## PROGRAMMING / TECHNICAL SKILLS / CERTIFICATIONS

**Languages & Frameworks:** Python, Java, JavaScript/Typescript, SQL, C/C++, Flask, Nodejs, Next.js, React.js, Express.js.

**Certifications:** Secure Code Warrior – White Belt Java (80.75%), Yellow Belt Java (81.26%), Orange Belt Java (70%)

**Familiar With:** NumPy, Pandas, Matplotlib, Agile, CI/CD, Git, Jira, Tensorflow, Pytorch, Jasmine, OpenMP, cilkplus.

**Other Tools:** Service Now, Ansible, Jenkins, Oracle Database, Grafana, Droit, Load Trade, Unix, MongoDB, PostgreSQL.

**Cloud:** AWS, Azure, Azure Devops.

## EXPERIENCE

### NEDD TECHNOLOGIES, Houston-Texas, United States

05/24 - 08/24

*Software Engineer I, Internship*

- Leading the development of the ESG Platform, from conception to launch, ensuring robust architecture and seamless integration.
- Developing a responsive and user-friendly Next.js application for clients, enhancing the overall user experience.
- Utilizing Azure DevOps to implement CI/CD pipelines, automated testing, and deployment strategies, significantly improving development efficiency and product reliability.

### HSBC TECHNOLOGY INDIA, Pune-MH, India

08/21 - 06/23

*Software Engineer, Shared Infrastructure Services, Trade and Transaction Reporting*

- Designed and developed 'Load Trade Archiving Service', a microservice platform using API gateways.
- Utilized python flask to implement robust backend service APIs, complemented by React for frontend development, significantly improving data accessibility and reducing weekly IT team search time by **30 mins** per team member.
- Received 'Star Performer' Award from HSBC in Q1, 2023 for 'Load Trade Archiving Service' project, an award presented to only **20 individuals** organization-wide for exceptional performance.
- Developed 'Service Now checker plugin', an ansible callback plugin to validate change record details before deploying changes to production.
- Created a spring boot application to replicate Service Now checker plugin, which provided api endpoints to validate the change records for deployments using tools other than ansible (example - Jenkins)
- Collaborated with AI team at HSBC and demonstrated a proof-of-concept of deep learning chatbot which answered frequently asked questions by business users. Received "Pat on the back" Award from HSBC in Q2, 2022 for this project.
- Managed Unix server deployments, supported diverse tools, and oversaw environments including UAT, OAT, and production.

## ACADEMIC PROJECTS

### RICE UNIVERSITY, Houston, TX

08/23 - 12/23

*Social Networking Application, Department of Computer Science.*

- Designed and implemented a social networking application, leveraging the MERN stack (MongoDB, Express.js, React, Node.js) to create a robust, full-stack solution.
- Focused on creating an intuitive user experience with React for the frontend, while building efficient server-side application using Express.js and Node.js. Used MongoDB for scalable data storage and management.

### VISHWAKARMA INSTITUTE OF TECHNOLOGY, Pune-MH, India

08/20 - 01/21

*Capstone Project. Structure from motion (Group of 4), Department of Computer Engineering.*

- Implemented a specialized Structure from Motion (SfM) algorithm optimized for architectural exteriors, generating 3D models.
- Developed an algorithm that reconstructed a 3D point cloud from the image's inherent geometry, providing a resource for photogrammetry applications.
- Generated point clouds from the Fountain P10 and Herz-Jesus P8 image sequences, achieving mean reprojection errors of 6.50 and 8.37, respectively. These point clouds enhanced the accuracy of architectural reconstructions.