

SWANAND SANJAY KHONDE

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EDUCATION

RICE UNIVERSITY

Master in Computer Science

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

Graduate Teaching Assistant – Computer Security, Web Development.

Houston, TX

08/23 - 12/24

VISHWAKARMA INSTITUTE OF TECHNOLOGY PUNE

Bachelor of Technology in Computer Engineering

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, Dropt, 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 efficient data management.
- Developing a responsive and user-friendly Next.js application for clients, enhancing the overall user experience.
- Building REST API endpoints from scratch using Python flask, improving back-end performance and usability.
- 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.