SWANAND SANJAY KHONDE

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EDUCATION

RICE UNIVERSITY Houston, TX
Master in Computer Science 08/23 - 12/24
GPA: 4.0 / 4.0
Coursework: Graduate Design and Analysis of Algorithm, Web Development, Parallel Computing.

VISHWAKARMA INSTITUTE OF TECHNOLOGY PUNE Pune-MH, India
Bachelor of Technology in Computer Engineering 08/17 - 06/21
GPA: 8.93 / 10
Coursework: Data Structures and Algorithms, Operating Systems, Machine Learning, Artificial Intelligence.

PROGRAMMING / TECHNICAL SKILLS / CERTIFICATIONS

Programming Languages & Frameworks: Python, Java, JavaScript, SQL, C, HTML, CSS, Flask, Spring Boot, Nodejs, React, Spark Java, Object Oriented Design Patterns, Angular, Express.js, jasmine, Junit, MongoDB.
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, Groovy, Django.
Other Tools: Service Now, Ansible, Jenkins, Oracle Database, Geneos, Grafana, Droit, Load Trade, Unix Sever management.

EXPERIENCE

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 architect and implement robust backend service APIs, complemented by React for frontend development, significantly improving data accessibility and reducing IT team search time by 30%.
- Received 'Star Performer' Award from HSBC in Q1, 2023 for 'Load Trade Archiving Service' project.
- Developed 'GSD 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, a microservice which provided api endpoints to validate the change records for deployments using tools other than ansible (example - Jenkins)
- Collaborated with AI team in 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 queries.

OPTIMUM DATA ANALYTICS, Pune-MH, India 08/19 - 01/20
Machine Learning Intern, Industry co-op

- Conceptualized and executed 'Document Classification using visual parameters', a deep learning project aimed at streamlining document categorization (letters, emails, resumes, invoices, etc.) for user convenience.
- Employed a Convolutional Neural Network (CNN) model for classification, achieving a raw training accuracy of 95.7% and a test accuracy of 83%. This project enhanced document management efficiency.

ACADEMIC PROJECTS

RICE UNIVERSITY, Houston, TX 08/23 - 12/23
Social Networking Application, Department of Computer Science.

- Designed and implemented a comprehensive 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 applications using Express.js and Node.js. Implemented 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 high-fidelity 3D models.
- Developed an algorithm that reconstructed a precise 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.