

Vaishavi Vijayakandan

vaishavi.vijayakandan@gwu.edu | 7034158333 | github.com/vaishavi | linkedin.com/in/vaishavi-vijayakandan

EDUCATION

The George Washington University, School of Engineering & Applied Science

Washington, DC

Master of Science in Computer Science, GPA: 3.7 / 4.0

Expected December 2024

Relevant course work: Design & Analysis of Algorithm, Advanced Software Paradigms, Cloud Computing, Linux for DevOps, Natural Language Processing, Machine Learning, Intro. to Big Data & Analytics

Anna University, SSN College of Engineering

Chennai, India

Bachelor in Electronics and Communication Engineering, GPA: 8.3 / 10

April 2021

Relevant course work: Data Structures, Database Management Systems, Probability and Statistics, Linear Algebra, Video Analytics, Digital Signal Processing

SKILLS

Programming Languages: Python, Java, SQL, C, C++, JavaScript, HTML5, CSS3

Framework / Software: React, AngularJS, Node.js, Spring Boot, Hibernate, MongoDB, Django, Spark, MySQL, Jira, AWS, Git, PyTorch, TensorFlow, Keras, scikit-learn, NumPy, pandas.

ACHIEVEMENTS

- **Oracle Certified** Professional **JAVA** 11 Developer.
- Awarded the **GW Dean's Award** for academic excellence, receiving a scholarship of over **\$30k**.

WORK EXPERIENCE

Software Technical Specialist III, The George Washington University

February 2023 – Present

- Designed interactive touch panels using **React**, improving projector and access systems in over 800 classrooms, labs, dorms, and conference halls
- Streamlined control systems with user-centric interfaces, achieving a **25% faster deployment** and a **40% increase in scalability** across various educational and residential settings

Senior Software Engineer, Larsen & Toubro InfoTech – India

August 2021 – December 2022

- Engineered and enhanced four **React front-end** sections, ensuring efficient integration with **Java back-end** for improved system communication
- Streamlined **two key microservices** with performance monitoring tools, boosting backend response times and reliability by **25%** in a fintech application
- Collaborated in **Agile teams** to transform requirements into technical solutions and upheld high documentation standards
- Led **CI/CD deployment of services**, adopted test-driven development, cutting down post-deployment bugs by 20%, and contributed to a feedback-centric team culture through active participation in **50+ Agile ceremonies**

TECHNICAL PROJECTS

Aircraft Anomaly Detection, Python | Tensorflow

- Implemented and Deployed **Enhanced Isolation Forest** and **Negative Sampling Neural Network**, achieving AUC scores of **85% and 82%** respectively, enhancing anomaly detection and safety in aviation datasets
- Spearheaded the implementation of explainable AI methods such as **LIME, SHAP, and custom implementations of Integrated Gradients and Layer Relevance Propagation** to elucidate anomaly detection model decisions
- Engineered a **user-centric dashboard using React**, enabling efficient monitoring and analysis of AI model outputs and interpretations, enhancing decision-making processes in identifying aircraft anomalies

Price comparison App, React | Python | Node.js | MongoDB

- Executed a cross-platform web application offering grocery price comparisons tailored for budget-aware shoppers and refined the user interface, emphasizing accessibility on Android devices
- Built a **custom web scraping API** utilizing **Selenium** to extract price data from 2 distinct grocery store websites

Data Security Web App, Python | Django

- Developed a **web application** leveraging **RSA encryption techniques**, specifically utilizing Mersenne Primes for enhanced security and data integrity
- Incorporated **LSB image steganography** with XOR for data hiding, bolstered by a two-factor verification system which led to a 94% decrease in data breaches, verified through comprehensive penetration tests

Farmer Scheme, React | JAVA

- Developed a **React and Java-based** online marketplace for farmers to auction their products daily, enabling the highest bidder system to maximize profits
- Implemented a seamless integration of **Spring and Hibernate** for backend processes with an SQL database, enhancing data management