PADMA PRIYA

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EDUCATION

George Mason University | VA, USA

Jan 2023 -Dec 2024

Master of Science in Computer Science

Relevant Courses: Advanced Algorithms, Embedded Systems, Secure Software Design, Software Testing,

Datamining, Computer Graphics, Information Security

GPA: 3.70/4

Anna University, St. Joseph's College of Engineering | Chennai, India

July 2018 - May 2022

Bachelor's of Engineering in Computer Science and Engineering

Relevant Courses: Data structures and Algorithms, Theory of Computation, Computer Networks, Mobile

Computing, Artificial Intelligence, Cryptography and Network Security, Graph Theory and Applications.

<u>GPA</u>: 8.12 / 10.0 (3.40/4)

SKILLS

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

Tools/ Framework: AWS, Canvas, Linux, Git, Tailwind CSS, MATLAB, NumPy, Pandas, React.js, Flask, Django, Node.js, VS Code, Figma, Vue.js, WordPress, Adobe XD, SQL Alchemy, REST API, MS Office, Terraform, Redux, Jest

Knowledge Areas and Skills: Frontend Development, UI&UX Designer, Data structure and Algorithms, AWS Cloud, Cloud Computing, Visualization, Web App. development, Machine and Deep Learning, Agile workflows and version control (Git, CI/CD)

Design Thinking, Product, Cross-functional Collaboration, Software Testing, Malicious Code Development, Strategic Planning, Thread Management, Problem-solving, Plugin Integration, Object-oriented programming.

PROFESSIONAL EXPERIENCE

Canvas Front End Developer (Part Time) | George Mason University, USA

Feb 2024 - Present

- Designed and Improved web-based training modules and course materials for multiple university courses, serving 200+ users through Instructure Canvas, HTML, and CSS, JavaScript in 5 Complete courses.
- Enhanced UI performance and maintained clean, reusable code to streamline future development.
- Followed the full SDLC process—from design and implementation to documentation and unit testing.

Graduate Teaching Assistant | IT Capstone Project Senior Design | George Mason University, USA

Aug 2024 – Dec 2024

- Contributed to the development and enhancement of 75% of course content and instructional methods using Instructure Canvas.
- Provided technical & analytical support for IT-based problem-solving, ensuring alignment with project goals.
- Provided mentorship to graduate students in data analysis, algorithm development, and software engineering techniques, improving project outcomes by 15%.

Software Engineer Intern | Oyster Training | India

Jun 2021 - Jul 2021

- Optimized responsive web applications using JavaScript & React, improving page performance by 20%.
- Connected front-end components to RESTful APIs, ensuring seamless data flow and handling 50+ API requests daily.
- Followed SDLC practices to write technical documentation and conduct 5+ successful integration tests.

ACADEMIC PROJECTS

Bug Tracking System with OOP Principles | Python, Flask, Matplotlib, Pandas, OOP, SQLite, Terraform

Aug 2024

- Designed a Python-based bug tracking system using OOP and SOLID principles, with a Flask dashboard, managing 500+ bug reports and reducing resolution time by 30%.
- Utilized Pandas for data analysis, Matplotlib for visualizations, and SQLite for efficient bug storage.

Dynamic E-Commerce Platform with Performance Optimization | JavaScript, React.js, Jest

Feb 2024

- Developed a responsive e-commerce app using React.js and integrated RESTful APIs.
- Optimized performance with lazy loading and code-splitting, improving load time by 25%.
- Ensured reliability with 90% test coverage using Jest.

Smart Home Automation - Embedded Systems | *C, C++ , Git, Linux Command Line*

April 2024

- Developed a smart home automation system on BeagleBone Black with FreeRTOS, integrating lighting, fire monitoring, doorbell, and blinds control, achieving a 30% faster response time.
- Optimized embedded system performance using C/C++ and thread management, reducing memory usage by 20% and achieving real-time control latency below 50ms.

Flaky Test Analysis and Fixing - Software Testing | Java, CI/CD, Git

Aug 2023

- Improved Java project stability by 35% with NonDex, cutting manual testing by 60%.
- Automated flaky test detection and integrated NonDex into CI/CD pipelines.
- Enhanced code reliability by fixing nondeterministic test failures and submitting pull requests.

CERTIFICATIONS

- AWS Certified Cloud Practitioner CLF C02 (Oct 2024 Oct 2027)
- Machine Learning for All (Coursera 24C6SYSQ79DC 2020)
- Artificial Intelligence Using Python (IEEE SB PIT 728 2020)