Pavani Ayanambakam

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EDUCATION

State University of NewYork at Buffalo   Buffalo, New York
Masters Degree in Computer Science, Major in Artificial Intelligence (GPA:3.87/4)   *Aug. 2023 – Dec 2024*
Bachelors Degree in Computer Science(GPA:8.81/10)

EXPERIENCE

Software Engineer   July 2021 – Aug 2023
Tata Consultancy Services(TCS)   *Bengaluru, India*
- Proficient in utilizing Angular, Python, GoLang to design dynamic interfaces and develop robust server-side logic, improving user interaction time by 20%. Created more than 16+ RESTful APIs to support various functionalities.
- Worked with Verizon, a leading US telecom client, to design a dashboard for tracking, monitoring 5G core network infrastructure's performance, boosting test coverage by 30% and cutting bug discovery time by 15%.
- Developed more than 35 UI components (charts, graphs, tables, maps) to visualize network data, 15+ interactive elements for data filtering, drilling down, and custom views.

MEAN Stack Developer   March. 2020 – June 2021
nVipani Technology solutions private Limited   *Bengaluru, India*
- Launched an e-commerce ,B2B application called "Shop Connect" which is a AR/VR based integrated shopping platform. Built a scalable backend using NodeJS to handle logistics for over 5,000 products from 238 B2B suppliers
- Gained expertise in React, Bootstrap by building aesthetic interfaces that boosted user engagement and sales by 24% compared to traditional B2B platforms. This projects comes under finance and retail domain.
- Created and integrated RESTful APIs for product data retrieval, order processing, and secure video chat functionalities, handling over 10,000 daily API requests with a 99% uptime

PROJECTS

Virtual Classroom application / *Python, Flask, React, PostgreSQL, Docker*   June 2023
- Developed a virtual classroom platform enabling over 500 educators to conduct online classes, with key features such as video conferencing, screen sharing, and recorded session access. Used React for the frontend, Python with Flask for the backend and MongoDB for data storage. Students can join classes, access recorded sessions.
- I applied concepts like kernel operations, OS/storage systems, job scheduling, resource management, and file systems to design and implement efficient system-level functionalities in the project.

RealTime AI driven Chat Platform / *React, ML models, NLP*   May 2023
- Engaged in a Machine Learning Hackathon as a team of 4. Integrated NLP models for smart features like sentiment analysis, message summarization, and AI-driven reply suggestions, improving response efficiency by 30%
- Built a responsive chat interface with real-time messaging, using React, which supported over 1,000 concurrent users, improving team communication by 30%.
- Reduced processing time by 25% using optimized algorithms, increasing overall efficiency of the hackathon project.

Malware Threat Detection using ML models / *Analytics, AI Platform, R Language*   May 2021
- Trained a model on a Malware Threat dataset with 83 features and evaluated performance using a confusion matrix.
- Utilized machine learning models including Gradient Boosting, Sequential Neural Network, and LightGBM to detect malware patterns, achieving 86% accuracy

Class Attendance through Face detection and recognition / *Python Scripting, Application Integration* May 2023
- Implemented a class attendance system using face detection and recognition with Deep Learning Models (Naive Bayes Convolutional Neural Networks), achieving 95% accuracy in recognizing faces through OpenCV for both images and video streams.

TECHNICAL SKILLS

Languages: HTML, CSS3, JavaScript, Python, Java, Go Lang, Bash, GitHub, Data Structures and algorithms, C, C++.
Skills: Angular, React, XML, JSON, node.js, REST APIs, Typescript, .NET, Junit, JVM, SPA, WordPress, NodeJS, Flask, MySQL, Oracle, ServiceNow instances, system administration/Unix tools, Spring Boot, Hadoop, Spark, AWS, RDBMS, GraphQL, MongoDB, relational databases, Debugging, Unit testing, Docker, Devops, Azure, Agile Software Development and Testing (SDLC), EC2, RDS, S3, Lambda, kinesis, SQS, SNS, OpenAPI, Linux Microservices, Linux, Kubernetes, Cloudant, Microsoft .NET (C#), SQL Scripting, PowerShell Scripting, Distributed systems, CI/CD pipelines.

Technologies: AWS Solution Architect course, Software Engineering , Data Science, DBMS, Computer Networks, Network Security, NLP, Reinforcement Learning, Cyber Security, Operating Systems.
Libraries: pandas, numPy, matplotlib, scikit-learn, tensorflow, keras, opencv.