



AAYUSH KUMAR JVS

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International Sapce Station

SUMMARY

- Experienced ML and AI Engineer with 5+ years of expertise leading scalable solutions, seeking senior engineering roles. Seeking full-time opportunities to leverage my skills in a dynamic and collaborative environment.

EDUCATION

- Master of Science - Computer Science
The University Of Maryland Baltimore County GPA: 3.5 *August 2022 - December 2024*
- Thesis: Quantized Large Language Models for Mental Health Applications: A Benchmark study on efficiency, accuracy and resource allocation
- Bachelor of Technology - Information Technology
SRM Institute Of Science And Technology GPA: 3.0 *July 2016 - June 2020*

EXPERIENCE

- UMBC Center for Research in Emergent Manufacturing**
Software Developer (Baltimore, MD) *Feb 2024 - Present*
 - Worked on making a **Vue.JS**, **Nuxt**, **AWS**, and **GraphQL** website for **crem-usa.com**.
 - Master's Thesis on Benchmarking Explanations from Quantized **Lare Language Models** on Mental Health Datasets.
 - Quantized Lare Language Models research published in **Proquest LLC**.
 - Managed and optimized **AWS** services including **Lambda**, **S3**, and **DynamoDB** to support the website's backend, ensuring scalability and cost-efficiency.
 - Enhanced the website's user experience by implementing responsive design principles and improving page load times through efficient **Vue.JS** and **Nuxt** practices.
 - Collaborated with a multidisciplinary team to integrate machine learning insights into my research.
- Astek Diagnostics Inc**
Software Engineer (Baltimore, MD) *Nov 2023 - Jan 2024*
 - Developed **RESTful APIs** to support the integration of the **Machine Learning** algorithm with the frontend, facilitating real-time G-Code generation.
 - Built and refined a **machine learning pipeline** that converts design files into G-Code, improving the accuracy and efficiency of the automated processes.
 - Created interactive **Figma** prototypes to streamline user feedback and iterate on the design, ensuring the final product met user needs.
- Google Summer of Code**
Software Developer at Red Hen Labs (Cleveland, Ohio) *May 2023 - September 2023*
 - Improved the **E2E ASR** system's accuracy by fine-tuning pre-trained models and incorporating data augmentation techniques.
 - Automated the process of tagging and transcribing audio/video files, reducing manual intervention and increasing throughput.
 - Collaborated with international teams to integrate **RHAT** with other systems, enhancing the overall functionality and reach of the project.
- RMSI Pvt Ltd**
Software Engineer (GIS) Contractor to Apple Inc (Full-time, India) *December 2019 - August 2022*
 - Designed and implemented a state-of-the-art full-stack **GIS** application using **FusionX Software by Apple Inc**, **Confluence**, and **Jira** for efficient data management.
 - Implemented **Test Driven Development (TDD)** methodologies, conducting rigorous unit testing and integration testing for each module.
 - Managed a dedicated team of 20 members, optimizing production support operations for key clients.
 - Spearheaded the development of robust automated Continuous Integration and Continuous Deployment **CI/CD** pipeline for Apple Maps Production and Development, collaborating closely with the QA team for continuous delivery.
 - Ensured adherence to industry standards and regulations throughout the development lifecycle, prioritizing security and best practices.

SKILLS SUMMARY

- Languages** Java, Python, HTML5, CSS3, JavaScript, TypeScript, Go
- Frameworks** Vue.js, Next.js, Angular, Node.js, React Native, Django, TensorFlow, Keras
- Cloud** AWS (EC2, S3, Lambda, RDS, DynamoDB, CloudWatch, ECS, EKS), Azure, Docker, Kubernetes
- Databases** MySQL, PostgreSQL, MongoDB, Redis, Oracle, GraphQL, Hadoop (HiveQL)
- Visualizations** Power BI, GIS, ArcGIS, FusionX, Tableau, Plotly API, D3.js
- Tools** LaTeX, Git, Kafka, Hibernate, Selenium, Figma, PySpark, Pandas, NumPy
- Methodologies** Agile, Scrum, DevOps, Test-Driven Development (TDD)