Suryaprakash Uppalapati

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**EDUCATION**

**George Mason University                                                                     Fairfax, Virginia.**

M.S. in Computer Science                                                           Expected Graduation, MAY 2026.

* **Concentrations:** Machine Learning
* **GPA:** 3.82/4.00
* **Related Coursework:** Introduction to Artificial Intelligence,Computer Systems and System Programming, Mathematical Foundations of Computer.

**Vel Tech Dr. RR & Dr.SR University Chennai, India.**

Bachelor of Technology in Computer Science  **GPA:** 3.6/4.00

**TECHNICAL SKILLS**

**Programming Languages:** Python (NumPy, Pandas, Matplotlib, Scikit-learn)

**Software:** Jupyter Notebook, PyCharm, Visual Studio Code (VS Code).

**Database Management Systems:** SQL (MySQL)

**Cloud Services:** AWS SageMaker, Amazon Bedrock, AWS S3,EC2,IAM.

**Version Control**: Git

**PROJECT EXPERIENCE**

**BCG Data Science Job Simulation on Forage September 2024 – October 2024**

* Completed customer churn analysis for PowerCo using Python (Pandas, NumPy).
* Achieved 85% accuracy using Random Forest in predicting churn.
* Delivered executive summary providing actionable insights.

**Domain-Specific Language Model Fine-Tuning with Meta Llama 2 August 2024 – September 2024**

* Fine-tuned Meta Llama 2 on AWS SageMaker for domain-specific tasks (finance, healthcare).
* Increased response accuracy by 30% for domain-specific inquiries.
* Delivered a proof of concept (POC) demonstrating the model's proficiency as a knowledgeable consultant, improving domain-specific response accuracy by 30%.

**Dynamic Object Detection System using YOLO February 2024 – June 2024**

* Developed a dynamic object detection system using YOLO, enhancing real-time detection accuracy by 40% and reducing processing latency by 20%.
* Engineered a scalable model architecture for seamless integration across cloud and edge environments.
* Improved detection precision by 30% through advanced data augmentation and transfer learning.
* Boosted operational efficiency by 50% with intelligent data pipelines for real-time analytics.

**ACTIVITIES AND LEADERSHIP**

**AWS DeepRacer Student AI-ML Competition *Prequalified for the AWS AI & ML scholarship***

* Ranked 22nd out of 316 in the US, 42nd in North America, and 364th globally.
* Optimized a reinforcement learning model for autonomous driving using AWS DeepRacer.

**CERTIFICATION**

* **DeepLearning.AI:** Supervised Machine Learning: Regression and Classification
* **Udacity Certification:** Introducing Generative AI with AWS
* AWS Academy Graduate - AWS Academy Cloud Foundations
* AWS Academy Graduate - AWS Academy Machine Learning Foundations
* PCAP : Programming Essentials in Python