Visruta Saripella

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Summary

Proven ability to transform business challenges into data-driven strategies, leveraging machine learning to optimize processes and deliver actionable insights for all stakeholders.

Education

Virginia Tech, VA   08/2023 - 12/2024
Master 's in computer science

Jawaharlal Nehru Technological University, India   08/2019 - 05/2023
B. Tech in Electronics and Communications Engineering

Certifications

- AWS Certified Developer Associate   05/2024 - 05/2027
- AWS Certified Solutions Architect Associate   02/2024 - 02/2027
- Certified professional in Containers w/ Docker, Kubernetes & OpenShift by IBM   02/2024
- Python Data Structures certificate from University of Michigan   07/2022

Skills

Languages and Frameworks: Java, Python, C, JavaScript, React.js, Node.js, HTML, CSS, jQuery, Bootstrap, Microservices, Data Structures, Pandas, NumPy, YAML.

Tools: Git, GitHub, Jupyter Notebook, REST, PyTorch, TensorFlow, scikit-learn, Apache Spark, Open AI GYM, SQL Server, PostgreSQL.

Platforms & Technologies: Azure, AWS, Docker, Kubernetes, EC2, MySQL, MongoDB, Matplotlib, Linux, Spring Boot, Ansible, VPC, CI/CD Pipelines, Clustering, Classification, Regression, DQN, PPO, RL.

Work Experience

AWS Cloud Data Engineer at Virginia Tech   09/2023 – 12/2024
- Streamlined data pipeline deployment using AWS CloudFormation and scripting with AWS CLI to ensure efficient and consistent data preprocessing and model training workflows.
- Optimized cloud operations for data workloads by managing AWS services (EC2, S3, Lambda) and monitoring resources with AWS Budgets and Cost Explorer to support large-scale data analysis and machine learning experiments, reducing operational costs.
- Implemented secure IAM roles to protect sensitive datasets, ensure compliance, and enable a secure, efficient data science environment.

Software Engineer intern at Deloitte   06/2024 - 08/2024
- Developed and optimized RESTful endpoints and scalable AI infrastructure for efficient backend operations.
- Designed and implemented reusable React components, enhancing user interfaces while supporting AI-driven features.
- Managed microservices architecture and automated CI/CD pipelines using Kubernetes, enhancing deployment efficiency.

Software Engineer in Micron Technologies.   07/2022 - 07/2023
- Designed a Tableau analytics tool and an optimized data pipeline, reducing processing time, while delivering actionable insights and enhancing data validation processes
- Containerized applications on OpenShift Kubernetes, improving resource efficiency, and implemented AWS Lambda for automating recurring tasks like backups. Monitored infrastructure with CloudWatch and enhanced CI/CD pipelines.

Projects

Hokie Event Sphere – AI-Powered Event Management Platform   08/2024 - 12/2024
- Designed and developed a centralized event management platform to unify fragmented communication and enhance event discovery for university students.
- Implemented a microservices architecture with a React.js frontend, Node.js backend, and an AI-powered recommendation system leveraging a Large Language Model (LLM).

Ducky: AI-Powered Coding Assistant   09/2024 - 12/2024
- Developed an AI-powered coding assistant, "Ducky," leveraging Python and LLMs like GPT models to provide intelligent suggestions and enhance productivity, achieving a 25% improvement in coding efficiency.
- Streamlined workflows by designing, testing, and integrating LLM-based utilities to enable accurate natural language understanding and real-time interaction, resulting in a 30% reduction in debugging time.

AI &ML -Powered Mobile Forensic Application for Fraud Detection   09/2023 - 12/2023
- Developed a sophisticated mobile forensic application with 98.5% data cleansing accuracy, enhancing data integrity and reliability for fraud analysis.
- Implemented advanced Artificial Neural Networks with 99.02% accuracy to predict and prevent fraud in Exploratory Data Analysis.

Deep Reinforcement Learning (DRL)-Based Intrusion Response System (IRS)   09/2023 - 11/2023
- Engineered an automated image captioning network model in the IoT framework, Multi-access Edge Computing, Network Intrusion Detection System (IDS)and cloud server which decreased processing time by 30%.
- Elevated overall system efficiency by 25%, showcasing the successful integration of cutting-edge technologies.

Achievements

- Two-time national gold medalist swimming India.   2018 & 2019
- Honored with Indian Social Impact Award for the young active student humanitarian.   2019