Jayanth Kumar

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SUMMARY

Passionate Data Scientist with a strong focus on user behavior, experience, and engagement. I am skilled in designing data-driven experiments, analyzing complex datasets, and uncovering actionable insights. Leverages a solid foundation in statistics and data science to drive product improvements and support measurable business growth.

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science
Master of Science in Computer Science, Artificial Intelligence Track *Expected May 2027*
Cumulative GPA: Present
Relevant Coursework: Artificial Intelligence, Machine Learning

UCSI University, Kuala Lumpur, Malayasia
Bachelor of Engineering (Honors) Mechatronic Engineering *January 2023*
Relevant Coursework: Computing for Engineers, Engineering Software and Applications, Robotic Systems

TECHNICAL SKILLS

Languages: C++, Python, SQL, R, JavaScript
Software: Jupyter Notebook, VS Code, GitHub, MySQL Workbench, Power BI, Tableau
Additional: Flask, AWS
Certifications: VIT Bangalore AI and Data Science Certification

PROFESSIONAL EXPERIENCE

Siemens, *Data Scientist* | Bangalore, India *May 2023 – July 2024*

- Built production ready ML models on large scale datasets to optimize marketing performance using advanced statistical and machine learning techniques.
- Developed scalable data pipelines and data integration workflows in collaboration with data engineering and operations teams.
- Created engineered feature sets and built classification, regression and clustering models using Python ML libraries and AutoML tools.
- Built frameworks to support reliable data ingestion, processing and model deployment.
- Partnered with analysts and scientists to extract insights and deliver data driven business value.
- Identified and recommended new AI/ML approaches to improve business and marketing performance.

PROJECT EXPERIENCE

Audio/Speech to Sign Language Converter, *AI Hackathon* *January 2025 – March 2025*
Technologies: Python, Transformers, LLM's, Tokenizer

- Trained and fine-tuned a LLM to translate audio extracted text into structured sign language representations.
- Performed dataset preprocessing, tokenization and embedding optimization to improve translation accuracy and model stability.
- Implemented training pipelines for LLM experimentation, hyperparameter tuning and model evaluation.
- Enhanced model performance by refining context understanding and sequence generation for accurate sign language mapping.
- Collaborated with teammates to integrate the trained LLM with speech to text and gesture generation modules, enabling end to end system functionality.

Automated Interviewing System, *Capstone Project* *October 2024 – December 2024*
Technologies: Python, NLP, Flask, HTML, CSS, JavaScript

- Designed and developed an automated mock interview platform.
- Implemented speech to text and text to speech modules to enable real time interactive interview simulations.
- Built LLM powered response evaluation system to score candidate answers based on relevance, clarity, sentiment and domain knowledge.
- Engineered features for candidate performance analytics, including skill gap detection, topic wise scoring and improvement recommendations.
- Integrated a web-based UI for seamless interview flow, user authentication and results visualization.

Skin Lesion Classification System, *Independent Project* *August 2024 – October 2024*
Technologies: Python, TensorFlow/Keras, CNN, Transfer Learning, Gradio, OpenCV

- Developed a deep learning-based skin lesion classification model using pre trained networks and custom lightweight CNN architectures.
- Trained models on the HAM1000 dermatology dataset to classify lesions into seven categories.
- Bulit an interactive Gradio web application enabling users to upload images and receive real time skin lesion predictions.
- Designed the system to assist dermatologists with early detection and reduce clinical workload through automated screening.

LEADERSHIP EXPERIENCE

UCSI University, Kuala Lumpur, Malayasia, *Chess Club Group Leader* *September 2019 – October 2022*

- Led a team of students organizing weekly chess sessions, tournaments and strategy workshops.
- Mentored junior members by teaching gameplay tactics, improving analytical thinking and encouraging participation.
- Coordinated events and fostered a collaborative environment that strengthened team engagement and problem-solving skills.

Scania Pvt Ltd, Bangalore, India, *Team Lead Intern Group* *January 2023 – April 2023*

- Managed a team of interns, delegating tasks and ensuring timely project delivery in a structured corporate environment.
- Facilitated team communication, progress tracking and problem solving to keep the group aligned with project goals.
- Provided guidance, mentorship and performance feedback contributing to improved productivity and team cohesion.