

Veeramanoahar Avudaiappan

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TECHNICAL SKILLS

Areas of Interest: Artificial Intelligence, Machine Learning / Data Product Development, Full-stack Development

Languages and Frameworks: Python, JavaScript, ReactJS, Node.js, TensorFlow, PyTorch, LangChain, Llamaindex, SQL, MongoDB

Tools and Technologies: AWS, GCP, Git, PowerBI, Adobe Analytics, Postman, Docker, Photoshop, Illustrator, Blender

EXPERIENCE

LatentView Analytics

Nov 2023 – Present

Data Analyst | Tech: Python, SQL, LangChain, Llamaindex, AWS, Adobe Analytics, JavaScript

Chennai, India

- Developed a production-grade RAG-based shopping assistant with a custom information retrieval algorithm and LLM security guard railing for a Fortune 500 client's e-commerce website, driving **\$17.6M** in projected annual revenue.
- Analyzed user web activity to identify friction points in the customer journey and implemented ML-based (clustering & regression) solutions that improved customer engagement by **~6%** and, a projected **\$1.4M** annual revenue growth.
- Conceptualized a GenAI-based recommendation system, vectorizing raw media data to enhance user engagement by **33%**
- Optimized a real-time tracking system by integrating AWS Lambda, Kinesis and Adobe Analytics, reducing latency to **12ms**.
- Led the development of 5 Generative AI products, involving AI agents, image generation, and LLM fine-tuning with LoRA.

Lapwing Ads & Government of Kerala

Jul 2023 – Nov 2023

Software Engineer - Augmented Reality (AR) | Tech: JavaScript, Three.js, AWS, SQLite, REST API

Coimbatore, India

- Developed front-end and back-end features for an educational AR game, including marker-based tracking, geotagging, leaderboards, and enhanced 3D rendering for browsers.
- Scaled the backend REST API to support **5000** concurrent users, attracting over **32k+** unique user sessions in 7 days.

Ocula Group SLU

Jan 2022 – Jun 2023

Software Engineer I | Tech: ReactJS, Node.js, AWS, MySQL, MongoDB, Python, REST API, Jira

Remote (Andorra, EU)

- Engineered an end-to-end MVC-based fullstack web application with role-based access control, RSA user authentication, and secure file storage, optimized to support **3,000** concurrent users, resulting in a **~28%** improvement in server response time.
- Streamlined and maintained an automated data pipeline for a collaborative filtering recommendation system deployed in AWS Sagemaker, saving users time by providing optimal client matches.

CORE Lab - Amrita

Jan 2022 – Jun 2023

AI Researcher | Google Scholar Profile: <https://scholar.google.com/citations?user=0sNZaMAAAAJ>

Coimbatore, India

- Conducted research in Generative AI, LLMs, Evolutionary & Optimization Algorithms, NLP, and Data Analysis, mentoring and collaborating with 3 students, leading to **5 publications in leading international conferences** and journals.

PROJECTS

<https://github.com/imveeru>

FAIrm | Python, LangChain, ChromaDB, AWS, OpenAI, Ollama, CrewAI

- Created an AI based multi-agent farming companion web app to support farmers in enhancing crop planning and quality monitoring by leveraging multimodal LLMs and RAG.

Learn Sign | Python, TensorFlow, ReactJS, Three.js

- Developing a Wordle-style 3D game with image segmentation and deep learning (CNN & PointNet) to learn Sign Language.

Pacemon | Python, OpenCV, PyTorch, MySQL, JavaScript | Top 15 submissions in Smart City Hackathon

- Demonstrated a computer vision web app for vehicle speed monitoring and penalty enforcement, using object detection.

EDUCATION

Bachelor of Technology in Electrical and Electronics Engineering

Jun 2019 – Jul 2023

Amrita Vishwa Vidyapeetham | First Class

Coimbatore,, India

- Spearheaded Anokha Techfest 2023, increasing participation by 14% and engaging over 10,000 participants, through strategic planning, resource allocation, and effective communication across 8 cross-functional teams.
- Managed Team Media, leading a community of over 120 students and overseeing multimedia projects for university events.

AWARDS / EXTRACURRICULAR

- Awarded as the **best employee** (Encore Award) for exceptional contribution to GenAI product development during Q2 of 2024.
- Received R&R Award in Q3 2024 for **consistent performance and innovative solutions** for new client's business challenges.
- Honored with the '**Business Impact**' award for the second half of 2024 for contributions to data and ML product development.
- Won the **Best Paper Award** at IEEE EDUCON, Greece, in the Digital Transformation track.