KAMALAM SIVAKUMAR

+91-9585518718 | kamalamsivakumar@gmail.com Current Role: Al/ML Research Engineer github-kamalamsivakumar | linkedin-kamalamsivakumar

PROFICIENT

Python

tensorflow, keras, pandas, numpy, scikit-learn

Machine Learning LangChain, Huggingface

Deep Learning AWS & Azure

NOVICE (CAPABLE & LEARNING)

django

streamlit Git

EDUCATION & CERTIFICATION

M.Sc Data Science (Integrated) | 2017 - 2022

PSG College of Technology, Coimbatore, India

Grade: 8.53/10

AWS Solutions Architect Associate

INTEREST AREAS

C++

SQL

Reinforcement Learning
Preference Learning
Interpretability

PROJECTS

spectra_net [code]

Deep Learning and Clustering for **Hyperspectral Image Classification**. Aims to **compare CNN** and **Clustering Algorithms**. While K-Means showed better separation, both clustering algorithms demonstrated moderate performance relative to the CNN's accuracy.

schedule_it [code]

Task Scheduler developed using Reinforcement learning techniques such as **Q-Learning** and **Double Q-Learning**, using Python.

The tasks are scheduled based on the CPU and Memory resources available at a single point in time.

clip search

Developed and productionized an advanced **image retrieval system** leveraging **CLIP** for a design/embroidery client. Built a vector store of image embeddings and implemented efficient search via **Azure services**.

heldig-selective (On-going project)

Developing a model to customize wallpaper selections in a random generator app by **fine-tuning user preferences** with **ORPO**. The project is ongoing, focused on **boosting recommendation precision**.

Future Work: Plan to explore model interpretability to assess ORPO's impact on preference alignment.

PROFESSIONAL EXPERIENCE

Kryptos Technologies, Chennai

May 2024 - Present

AI/ML Research Engineer

- Leveraging gen-ai to effectively handle admin tasks such as transcription and proposal writing.
- Aiding development and integration of gen-ai tools within Customer Solutions.
- Researched, developed, and integrated gen-ai tools into Customer Solutions, delivering multiple PoCs tailored to customer needs.

Everstage, Chennai Oct 2023 - Feb 2024

Business Analyst

- Developed a comprehensive understanding of customer data requirements.
- Contributed to enable stakeholders with **reports**, for them to gather insights.
- Collaborated with the Internal Revenue Operations (RevOps) team to support various tasks.

Jan 2022 - Aug 2023

KPMG, Bengaluru

Consultant

- Audit Analytics: Automated audit processes using Python and Alteryx, speeding up process handling. Refactored a
 process, reducing runtime from 2 days to just 10 minutes—a 99.65% improvement in efficiency.
- · AWS Solutions: Built a pipeline with Kinesis, Glue, S3, and Redshift to process and store streaming data.

HCL Technologies, Noida

Jul 2020 - Oct 2020

ERS Team Intern

- Designed Price comparison logic for Industrial Customers to manage their Inventory and update minimum prices effectively.
- **Developed** intricate backend logic for scraping and refining data sourced from competing websites. **Continuous learning** and **improvement of software development processes,** also focused on **learning best practices.**