# 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

C++

SQL

# **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**

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-Al 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.