

# KAMALAM SAI SIVAKUMAR

+91-9585518718 | kamalamsivakumar@gmail.com  
[github-kamalamsivakumar](#) | [linkedin-kamalamsivakumar](#)

---

## ABOUT

Master's graduate in Data Science with over two and half years of experience as a big4 consultant, business analyst, and an ai/ml engineer. Inquisitive data enthusiast working on solving challenging and interesting problems in the real world. I take ownership of my work and strive to deliver the highest quality solutions.

---

## WORK EXPERIENCE

### AI/ML Engineer, Kryptos Technologies

May 2024 - Present

- 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.

### Business Analyst, Everstage

Oct 2023 - Feb 2024

- 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.

### Consultant, KPMG

Jan 2022 - Aug 2023

- Audit Analytics: Worked on understanding the requirements and built routines for The Audit Functional Team. Employed data handling techniques and enabled the Client Audit Team to methodically process the data faster. Automated audit processes, used Python and Alteryx extensively for the same.
- AWS Solutions: Using AWS Kinesis and Glue built a pipeline that processes streaming data from S3 onto Redshift Database schema. Designed backend to consume and make use of stored data in business-specific applications.

### ERS Team Intern, HCL Technologies Ltd.

Jul 2020 - Oct 2020

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.

---

## EDUCATION

### M.Sc Data Science (Integrated)

Jun 2017 - Jun 2022

First Class with Distinction, Grade: 8.53  
PSG College of Technology, Coimbatore

## CERTIFICATIONS

AWS Solutions Architect Associate

---

## SKILLS

- Python
- Machine Learning
- Deep Learning
- Tensorflow
- keras
- pandas, numpy, scikit-learn
- SQL
- AWS
- C++
- Alteryx
- Git

## PROJECTS

### beat\_check

- A Deep Convolutional Neural Network that helps in classifying heartbeats from the given ECG images.
- The model aims to classify the five types of non-life-threatening arrhythmias and enable to diagnose of them efficiently.

### schedule\_it

- 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.

### spectra\_net

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

### lingloom\_novitiate

- Completed a series of foundational NLP projects, gaining hands-on experience with various NLP techniques and tools.
  - **Key Projects:**
  - **NLP for Analyzing Disaster Tweets:** Utilized NLTK and spaCy for preprocessing, and implemented Multinomial Naive Bayes and BERT for tweet classification.
  - **Sentiment Analysis:** Conducted sentiment analysis using rule-based (VADER) and machine learning approaches (Naive Bayes, Logistic Regression, KNN) on reviews.
  - **Aspect-Based Sentiment Analysis (ABSA):** Implemented ABSA using spaCy and VADER for extracting and classifying aspects and associating polarity scores.
  - **Named Entity Recognition (NER):** Developed NER models using spaCy and Conditional Random Fields, and explored shallow parsing and POS tagging.
  - **Custom Named Entity Recognition (Custom NER):** Built custom NER models with spaCy, including data annotation, configuration, and training.
  - **BERT for Question Answering:** Applied BERT for QA tasks, including tokenization, context handling, and training with Hugging Face Transformers.
  - **Question-Answering and Text-Generation:** Implemented question-answering and text-generation using large language models and vector databases.
  - **Skills Acquired:** Text preprocessing, sentiment analysis, aspect-based sentiment analysis, named entity recognition, custom NER model development, BERT for question answering, vector databases, and text-generation using LLMs.
  - **Technologies Used:** NLTK, spaCy, VADER, BERT, Hugging Face Transformers, PyTorch, Naive Bayes, Logistic Regression, KNN.

### clip\_search

- Developed an advanced image retrieval system leveraging CLIP (Contrastive Language-Image Pre-Training).
- Constructed a vector store composed of image embeddings.
- Implemented efficient search functionality that returns relevant images based on text queries.