ARUN MANI SAM

arunsam091@gmail.com (+91) 9895810112, Thrissur, Kerala

ABOUT ME

Skilled Data Scientist with 6 years of experience in Machine Learning, Statistical Modeling, and Data Analytics. Good experience in handling NLP, Computer Vision, Imaging and Video, with exposure to large language models (LLMs) like Open AI.

SKILLS

Digital Skills

Python | Data Science | Machine Learning | Deep Learning | Natural Language Processing (NLP) | Computer Vision | Anomaly Detection | Log analytics | Open AI | Browse.AI | GPT-3 | DALL-E | Prompt Engineering | AWS SageMaker | Matplotlib | Pandas | Scikit-Learn | Numpy | Tensorflow | OpenCV | Keras | Pytorch | Seaborn | Tableau | UiPath RPA | Android Development | Java | React.JS | MySQL | Mongo DB

Certifications

[2023] **Master AI with Prompt Engineering (UDEMY)**

[2023] **Machine Learning (Upskill)**

[2022] **Tableau Certification (Data Camp)**

[2022] **NLP For Beginners (Upskill)**

[2017] **Android and Java Development (UDEMY)**

[2015] **Google Adwords (Google)**

[2015] **Google Analytics (Google)**

[2019] **UiPath Advanced Developer Certification (UiPath)**

[2019] **UiPath Solution Architect Certification (UiPath)**

WORK EXPERIENCE

Senior Associate Data Scientist – Securekloud Technologies, Chennai, India   [Jan 2022 – Jan 2023]

SecureKloud is a cybersecurity company providing cloud security solutions and managed security services to organizations across the world.

Time Series Modeling using Neural Networks
Data preprocessing using Numpy , Pandas and Scikit learn. Building Time series model using Neural Beats Algorithm , Prophet , AutoArima , ARIMA and Auto time series for health services domain. Prediction and Testing the models

Custom Entity Extraction from Documents (NLP Natural Language Processing)
Entity extraction using RoBERTa-base (BERT) and GPT-3 models for various documents like Aadhar, Pan, Driving license, Passport, Voter id, Invoices, Receipts and Bank statements. Prediction and Testing the models. Fine tuning the hyper-parameters. Spacy/HuggingFace models. Data collection, pre-processing , feature extraction, model creation, performance improvement

Sentiment Analysis with GPT-3 and Browse.AI (POC)
Browse.AI used to extract text from websites and GPT-3 APIs analyze sentiment using Python, to evaluate LLMs. Open AI playground used for initial prompt testing. Output generated in csv.

Senior R&D Engineer – Inspirisys Solutions Ltd, Chennai, India   [Sep 2017 – Jan 2022]

Inspirisys Solutions Limited is a global IT services company that offers a range of services, including digital transformation, application development, infrastructure management, and cloud solutions, to help businesses improve their operations and achieve their goals.

SSD Object Detection Models Using Amazon AWS SageMaker
Training SSD models using SageMaker for vehicle damage detection and classification enabling repair cost estimation for insurance purposes.

SSD Models using TensorFlow and TensorFlow Lite
Developed Android SSD Tensorflow Lite model. Model first developed using Tensorflow and converted to Tensorflow Lite for Implementing it in Andoid using Bazel (linux). Testing on Android Device.

Ref : https://www.inspirisys.com/objectdetection_in_tensorflowdemo.pdf

PCB Image Anomaly Detection using Convolutional Auto-Encoders
Training Inception-CAE and SKIP- CAE models with high resolution PCB images. Testing and fine tuning the models for Electronics PCB manufacturing anomaly detection.
Ref : https://www.inspirisys.com/Locating-Defects-Manufacturing-QC-PCB-Board.pdf

Intel OpenVINO for Face Detection, Text Detection and Recognition
Deploying Intel Model Zoo public pretrained models for face detection, text detection and face recognition. Proficient in OpenVINO for optimizing deep learning models on edge devices.

Log Analytics – Anomaly detection for cybersecurity SOC
Data preprocessing using Numpy and Pandas Library, and implemented deep learning Auto encoders for anomaly detection. Utilized Self Organizing Maps (SOM) for visualizing high dimensional data and identifying patterns. Applied K-Means clustering and Isolation forest algorithms for identifying anomalies and outliers. Also used PYOD (Python Outlier Detection) library.

Amazon AWS & SageMaker
Launching EC2 instances for deploying servers. Launching AMI instances for deep learning. Using Amazon S3 for storage purposes. Using AWS SageMaker for models training.

Chatbot Frameworks
Developed Banking bot Mobile app POC enabled with IBM Watson assistant. Developed SOC assistant bot using RASA framework, handling RPA integration using UiPath.

SEO Analyst – Phoenix Operands, Thrissur, Kerala   [Mar 2014 – Mar 2015]

Phoenix Operands provides search engine optimization services to help businesses improve their online visibility and increase their website's ranking on search engine results pages.

Analytics, Keyword Planning, Onpage Optimization, Offpage Optimization, Site maps for Manufacturing and Electronics domains.

CONTRIBUTED ARTICLES

Single Shot Detector (SSD) using TensorFlow

https://www.inspirisys.com/objectdetection_in_tensorflowdemo.pdf

Manufacturing Quality Control for PCBs using Convolutional Auto Encoders

https://www.inspirisys.com/Locating-Defects-Manufacturing-QC-PCB-Board.pdf

Developing Object Detection Models for Android using Tensor Flow

https://www.inspirisys.com/blog-details/Developing_Object_Detection_Models_for_Android_Using_Tensorflow/16

HTTP Protocol in RFCs

https://www.inspirisys.com/HTTP_Protocol_as_covered_in_RFCs-An_Overview.pdf

EDUCATION

B.Tech in Computer Science and Engineering *Karunya Engineering College, Coimbatore, India, 2013*