

K S SARIKA

LinkedIn ◇ sarika-k-s-b094b61ba || **Email** ◇ sarika.ks.official@gmail.com

|| **Github** ◇ sarikaksstres || **Phone No** ◇ +91 8075841629

EDUCATION

College Of Engineering Trivandrum Masters in Computer Applications CGPA : 8.94	2022 - 2024
Sree Ayyappa College - University of Kerala BSc Computer Science Overall Percentage: 92.02 <i>University First Rank</i>	2019 - 2022
St.Thomas Residential Central School, Ezhammile 12 th Grade – CBSE Overall Percentage : 94.2	2018 - 2019
St.Thomas Residential Central School,Ezhammile 10 th Grade – CBSE CGPA : 10.00	2016 - 2017

EXPERIENCE

TATA ELXSI <i>SDE Intern - Transportation and Buissiness Unit</i> <i>MERN — Data Analytics — Three.js — Web Automation</i>	MAR 2024 - PRESENT <i>Technopark Campus, Trivandrum</i>
• Worked as a part of project team AAD-LOKI for testing and validation of Jaguar and Land Rover • Project team member for testing and validation of Jaguar and Land Rover. • Automated NATS website using Playwright and Python. • Developed a website for scope3 emission calculation during employee commutation using MERN stack ,Three.js and Blender for 3D Animation.	
International Centre for Free and Open Source Software <i>NLP Intern</i> <i>MXNet— TensorFlow—Pytorch</i>	MAY 2023 - JUN 2023 <i>Karyavattom, Trivandrum</i>
• Malayalam Poem Generator using Poetic Meters, leveraging NLP algorithms to analyze and generate authentic poetry • Created Poetic-Meter Classifier that classifies 6 poetic meters with 93.4% accuracy • Creation of a poem dataset containing 10,000 poem lines including both classic and modern poetry and Malayalam OCR using Tesseract • Worked in the Optimization and usage of LLMs in NLP	

PROJECTS

MentalEase.ai - Mental Health Companion <i>complete mental health companion using TTS, GenAI, Sentiment Analysis, Machine Translation</i> <i>MERN—Three.js—Firebase—GPT—BERT—MXNet—LangChain</i>	2024
---	------

- Created a virtual assistant using Speech recognition and sentiment analysis to detect mental issues. Optimization of GPT-3 for text generation using LangChain. google TTs for voice generation
- Supports Malayalam conversations enabled using Machine translation
- Video sentiment Analysis using OpenCV
- Animated 3D avatar using react threejs and blender. Lip Sync using rhubarb lyp sync library
- Video Suggestion using KNN, Diet-paln and CBT based report Generation using Decision-tree algorithm
- Finding Doctors and routemap using mapbox API
- Video Sentiment Analysis using OpenCV and Finetuned ResNET (95.6% Accuracy)

Thenmavu - Malayalam Poem Generator (Ongoing)

JUL 2023 - Present

Malayalam poem generator satisfying the 'vrutham' rules aiming to produce quality poems

- Created Poetic-Meter Classifier that classifies poetic lines into 6 poetic meters with 93.4 % accuracy
- Performed rhythm correction on poetic lines to adhere to established meter rules of 4 poetic meters
- Aggregation of unstructured data from 40+ poem sources to build a Dataset with 10,000 lines using Malayalam OCR (Ongoing)

SNAPE - Virtual Assistant Using Voice Cloning

2020

An attempt to clone the voice of Alan Rickman to generate a new fun-filled assistant for all Potterheads

- Developed voice cloning techniques utilizing WaveRNN and SV2TTS resulting in 15% improvement in quality over existing techniques
- Developed and implemented a cutting-edge Text-to-Speech (TTS) system, utilizing deep learning algorithms, attaining 40% faster voice generation and enhancing user experience.

Wild Animal Detection System

2024

Wild Animal Detection using Mobilenet

- Identify and Send Warning by analysing CCTV footages for wild animals

TECHNICAL STRENGTHS

Computer Languages	Python - Scikit, Scipy, MathPlotLib, Pandas, Numpy, Tensorflow, Keras,PyTorch JAVA, Javascript, C, PHP
Frameworks & APIs	Django, React, TailwindCSS,MERN
Databases	MySQL, MongoDB, SQLite ,AWS
Tools	MS Word, MS Excel, MS PowerPoint, MatLab, MXNET, LangChain, Latex
Additional Skills	Integration of model-based engineering tools,Multidisciplinary analysis & optimization Operations Research, Process Control , Fluent written and spoken English

COURSES AND CERTIFICATIONS

AWS Cloud Solutions Architect Professional Certificate

2024

Coursera

Amazon EC2 — AWS Lambda — Amazon ECS — Amazon RDS — Amazon DynamoDB— Amazon S3

DevOps on AWS Specialization

2023

AWS & Coursera