



Technical Proficiency

Programming Languages	Python3, C, R Programming, Embedded C
Web Frameworks	Django, Flask
Databases	Sqlite3, MongoDB
Big Data	HDFS, Apache Pig, Hive, Apache Spark
Mathematics	Linear Algebra, Probability and Statistics
Cross Compilers /IDE	MPLAB, Keil, Arduino IDE, MATLAB
Microcontroller/ Processors	PIC, ARM, Arduino, Raspberry Pi
Communication Protocol	I2C, SPI, CAN
Visualization Tool	Tableau Desktop, Power BI, Cognos Dashboard
Cloud Platform	IBM Cloud, GCP
Python ML Packages	NumPy, SciPy, Scikit-learn, TensorFlow, Keras, Pandas, Matplotlib, Seaborn, Plotly, NLTK, Speech Recognition, OpenCV
Machine/Deep Learning Algorithm	Linear Regression, Logistic Regression, Decision Tree, SVM, Naive Bayes, kNN, Random Forest, CNN, RNN.
Other	Docker, MS Office, Git

STRENGTH

- Good Communication and Team work
- Honesty and Integrity
- Self-Motivated
- Analytical Thinking
- Problem Solving
- Quick learner

LANGUAGES

- Hindi
- English
- Tamil

EXPERIENCE

STUDENT INTERN

DATA SCIENCE AND ANALYTICS CENTRE [DSAC], Feb. 2021 - Current

- Significant fields of study include - Machine Learning, Natural Language Processing, Computer Vision and handling Big-Data tools.
- Design and Develop Dashboards, Reports using visualization tools like Tableau-Desktop and PowerBI for various case-studies.

APPRENTICESHIP

TOYOTA INDIA | T-TEP, Jan 2016 – June 2016

- Got practical exposure to various Automobile Services Operation, periodic maintenance etc.
- Worked on setting of Timing Belt and Gears and servicing of various Automobile components.

EDUCATION

BACHELOR, Automobile Engineering, May 2022

Karpagam College of Engineering, Coimbatore

DIPLOMA, Automobile Engineering, April 2019

Karpagam Polytechnic College, Coimbatore

ITI, Mechanic Motor Vehicle, April 2016

Fr. Agnel Technical Institute, Mumbai

SSC, March 2014

Our Lady of Good Counsel High School, Mumbai

PROJECTS

AI Enabled – Voice Assistant in Data Analytics using RASA [Current]

The goal of this project is to accompany a person's Queries by make use of voice command to interpret with data and visualize it to the person.

F1 Racing Data Analysis using Tableau [Feb 2021]

Created a Dashboard on the F1 circuits, Grand prix season from year 1950-2020

Analyzed the Top 10 racers and constructor by using Multiple datasets and visualized in the dashboard.

Defense against Trojan attack on Deep Neural Network [Dec 2020]

The goal of this Project is designing a backdoor detector for BadNets trained on the MNIST dataset. We decided to implement the defense strategy explained in the paper by Gao et al., STRIP: A defense against trojan attacks on deep neural networks (2019).

Environment- Keras, NumPy, OpenCV, PyCharm

Virtual Based Autonomous Vehicle [MINI PROJECT]

This project proposes a virtual self-driving car and a testing environment where it will be evaluated. The virtual environment fabricates the domain such like that it is the mimics of the activity of a genuine car.

Environment –Carla Simulator, Deep Learning (CNN), pygame, OpenCV, Jupyter notebook

INTERESTS

- Gaming
- Travelling
- Cooking
- Music
- Gardening
- Artificial Intelligence

PERSONAL INFORMATION

Birth Date

June 10th 1998

Gender

Male

Marital Status

Single

Full Name

Sam Clastine Jesumuthu

Nationality

Indian

Impact of COVID 19 on Food Security Visualization Dashboard Based on Machine Learning [IBM HACK CHALLENGE 2020]

Created a machine learning model to predict supply –food security level of people and provide a dashboard to show lockdown situations and Supply Demand can impact the food security of people.

Environment – Machine Learning, IBM Watson Studio, Node Red, Cognos Dashboard

Distance Measurement and Object Detection System Based on Ultrasonic Sensor [FEB 2020]

This system is capable of detecting objects whether they are stationary or moving and obtain their exact location, direction and distance. It constantly monitors an area of limited range and reports to authorities as soon as an object is detected two sets of alerts can be activated at the same time.

Fabrication of Tricycle for Physically Challenged Person Using Steering Column Propulsion [MARCH 2019]

This tricycle relates to a portable self-propelled device without using either electric or fluid power. In some embodiments it also helps to take a turn too easily than the normal wheel chair.

Micro-Certifications

- Deep Learning Specialization by Coursera
- Self-Driving cars Specialization by Coursera
- Advanced Machine Learning and Signal Processing by Coursera
- Node-RED: basics to bots by IBM

Activities & Achievements

- Received 1st prize in Geek Talk at “TECKSPARK-18” a National Level Technical Symposium.
- Participated in 6th International Conference EEICC-2019 and presented a paper titled on “Study and implementation and evolution of 3D object detection in Autonomous vehicle”.
- Participated in 2nd National Level Undergraduate Research Conference and presented a paper titled on “Embedded system in Automobile Vehicles”.
- Student Placement Coordinator.
- Event Coordinator for “Dhruva 19” a National Level Cultural Techno Festival.
- Earned award in Google Cloud Training on “Set up and configure a Google Cloud Environment”.

Declaration

All information in this resume is right and truthful to the best of my knowledge and faith.