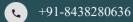
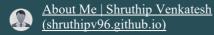
SHRUTHIP VENKATESH

TECHNICAL SPECIALIST Bangalore, Karnataka, India

shruthipv619@gmail.com









ABOUT ME

Leverage my expertise to contribute to the company's long-term goals, while continuously enhancing my skills and staying updated to deliver exceptional performance.

EDUCATION

• Executive Post Graduate Program in Machine Learning & Artificial Intelligence (2024) International Institute of Information Technology, Bangalore

CGPA: 3.87/4

• Bachelor of Technology/ Electrical and Electronics Engineering, (Gold Medal) (2018)

Bachelor of Technology/ Electrical and Electronics Engineering, (Gold Medal) (2018)
 Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Coimbatore
 CGPA: 9.92/10

• Higher Secondary Education (12 th)

(2014)

Petit Seminaire Higher Secondary School, Puducherry

Percentage : 98.16

 $\bullet \ SSLC (10 \ th) \tag{2012}$

Petit Seminaire Higher Secondary School, Puducherry

Percentage : 97.2

EXPERIENCE

➤ CONTINENTAL AUTONOMOUS MOBILITY, Bangalore (Feb 2022 – Present)

Project: Lane Detection and Post Processing System (June, 2024 - Present)

Description As part of the ML project, worked to build models to extract lane information

from camera-captured images and performed post-processing to refine model outputs for enhanced accuracy.

Role ML Engineer, C++ Developer

Skills Python, C++, Machine Learning, Computer Vision, Image Processing

Tools Visual Studio, Weights and Biases, Tensorboard

Project: Problem Report Analyzer

(Aug, 2024 - Present)

The idea earned second place in a pitch fest, and I had the opportunity to present it at a global company tech talk.

Description Developed a Generative AI-based tool designed to eliminate redundant efforts

in analyzing existing or similar problem reports, streamlining the process and

improving efficiency by 10x

Role Lead Developer

Skills Python, Generative AI, Prompting LLM, RAG

Tools Visual Studio, Open AI API, ChromaDB, Jupyter Notebook

Project: Comprehensive Environment Modelling (Feb. 2022 - May 2024)

Description As part of the ADAS project, worked as a developer in modelling and tracking the environment around the vehicle. The environment includes *static and*

dynamic objects, parking slot and road information.

Role Sensor Fusion Developer, Product Owner (for static object modelling)

Skills C++, Kalman Filter, Association and Gating

Tools Visual Studio, cmake, bricks, DOORS, Helix QAC, Gtest

Innovation (April, 2022 - Present)

Description I have been leading the innovation activity in the team and taking the team

towards filing patents. And developing tools for enhancing productivity.

(One of my patents is approved for patent filing)

Role Lead, R&D

SKILLS

Technical:

- Hands on experience in:
 - Sensor fusion using Kalman filter and Association for environment modelling.
 - HomeKit.
 - Bluetooth and WiFi.
 - Machine Learning.
 - Image Processing (OpenCV)
 - Generative AI
 - Code quality like code coverage test (Gtest), MISRA standard, tracing the requirements.
 - Beginner Windows application development
- *Languages:* C, C++, Python
- Tools: Git, Jira, DOORS, Confluence, Bitbucket, SVN
- IDE: Visual Studio Professional, Visual Studio Code, Jupyter Notebook,IAR, Wiced Studio, Code Composer Studio, LabVIEW, Arduino

Non-Technical:

- Team player
- Good communication skills
- Multitasking
- Organizing
- PowerPoint presentation

LEADERSHIP

- Lead innovation team for developing tools for enhancing the productivity
- Lead innovation activity for patent filing
- Lead a team of 3 for a proof of concept of XY plotter-based test automation
- Technical Co-Head of EEE department for Amrita Annual

Project: HomeKit feature using Wi-Fi

(Feb 2019 – Feb 2022)

Description A thermostat regulates a home's HVAC system and, with IoT, becomes a

> smart device. Apple's HomeKit enables seamless integration of third-party devices into its ecosystem, using WiFi to connect the thermostat to mobile

devices for easy control.

Role Developer **Skills** C.C++

Wiced Studio, IAR **Tools**

Project: Thermostat enabled with Bluetooth 5.0

(Nov 2018 – Jan 2019)

Description This project aims to enable thermostat control via BLE 5.0, allowing users to

operate the device without an internet connection while at home. It includes initial device setup and cloud registration when internet access is available.

Role Developer

Skills \mathbf{C}

Tools Code Composer Studio

Project: XY plotter based test automation

(Nov 2019 (2 weeks))

Description In this proof of concept, the mobile app test cases are automated using XY

plotter (AxiDraw). The main concept used here is image processing.

Role Lead (a team of 3), Developer

Skills Python

Tools Visual Studio Code, Tesseract, OpenCV

INTERNSHIP

RESIDEO (R&D) [Honeywell Homes], Bangalore

Project: Detection of events based on audio (May, 2018 - Aug 2018)

The project aims to detect various home events using audio data, **Description**

leveraging Machine Learning to analyze and identify events and notify

the user accordingly.

Skills & Tools Python Developer, Visual Studio Code

HONEYWELL TECHNOLOGY SOLUTIONS(R&D), Bangalore

Project: General Purpose Sensor for Home Environment (Jan, 2018 – Apr 2018)

Description This project aims to integrate multiple sensors to detect home events

and provide the information to users. Additional features include using a mobile interface to connect a Raspberry Pi to a WiFi access point and

enabling firmware updates to the latest version.

Skills & Tools Python Developer, Visual Studio Code, Raspberry Pi

INDIAN INSTITUTE OF TECHNOLOGY, MADRAS

Project: Performance Analysis of solar panel (Jun, 2016 – July 2016)

The designed tester is used to evaluate the efficiency and various Description parameters of a solar panel, including conducting open circuit and

short circuit tests using electronic circuits.

Skills & Tools LabVIEW, Arduino

COURSE WORK

- Completed EPGP Degree in AI & ML in IIIT, Bangalore. During the course, various projects were developed related to
 - Data science Predicting bank defaulters, Telecom Churn, House price, demand for bike sharing
 - Neural network Eye for Blind, Melanoma disease classification, Gesture recognition
 - Generative AI ChefGPT, IP consultant based on Arxiv website, Myntra Fashion AI
- Completed Self Driving Car Nanodegree in Udacity sponsored by KPIT. The Course consisted of five projects as explained below.
 - *Finding Lanes* Detect lanes in the images using python and OpenCV techniques.
 - Advanced Finding Lanes Detect lanes in the images in a more realistic environment like shadows, curves, etc.
 - Traffic Sign Classifier Classify the traffic signs seen on the road using Neural Network. The open-source German traffic sign dataset is used to train the network.
 - Behavioural Cloning Train the Neural Network to drive the car as trained. The data was collected by driving the car by myself.
 - Extended Kalman Filter Fuse Laser and Radar sensors to predict the position of the vehicle.

AWARDS

- Spot Award for performance excellency.
- Bronze Award(two) for BLE enabled devices.
- Bravo Award for XY plotter based test automation.
- **Best Outstanding Student** (2014-2018)
- Best Academic Performance (2016-2017)
- Outstanding Student of the Year (2015-2016)

ACHIEVEMENTS

- . Went to National Level Finals in "Delta Cup" by DELTA ELECTRONICS Ltd. 2017.
- Made a **Poster Presentation** on Industrial Waste Management **Robot** at "International Conference on Robotics for Automation and Humanitarian Activities (RAHA)" conducted during December,2016 at Amrita School of Engineering, Amritapuri.
- Secured *First* in "Shaastra Circuit Design Challenge" at IIT MADRAS Techfest, Shaastra 2016
- Secured **Second** in "Eleckart" at **IIT** MADRAS Techfest, Shaastra 2016
- Secured *First* in "Fist of Fury" at Amrita Annual Techfest 2016

PROJECTS

Some of the college projects:

- 1) LabVIEW based Robotic Arm control
- 2) Automated Cloth Protector
- 3) Digital Power Factor Meter
- 4) Networking of motors

PERSONAL DETAILS

Date of Birth : 16/12/1996

Father : Venkatesh Babu. V

Mother : Maniula. V

Languages: Telugu, Tamil, English, French

Mother Tongue: Telugu

Hobbies: Travel, Music, Movies