

Kasthuri Avusali

Address Hyderabad, India 500038

Phone 9550237353

E-mail kasthuriavusali@gmail.com

To work in an environment which encourages me to succeed and grow professionally where I can utilize my skills and knowledge appropriately.

Proficient in Embedded C programming with a strong emphasis on microcontroller platforms such as Atmega328p, STM32, LPC1768, and LPC1769. Possessing in-depth knowledge of communication protocols such as UART, SPI, I2C and CAN bus. Familiarity with C and C++ programming languages, Python for scripting, automation, and testing purposes.

WORK EXPERIENCE

VERTILINK TECHNOLOGIES – HYDERABAD 09-23 To 03-25

Embedded Systems Development: Spearheaded the development of prototype projects aimed at providing technical assistance to students.

Coding Expertise: Proficient in languages such as C, C++, and assembly language for microcontrollers.

Project Management: Successfully managed multiple prototype projects simultaneously, adhering to strict deadlines and project requirements. Oversaw the documentation process for all projects, meticulously recording project specifications, design considerations, and implementation details.

Training and Mentoring: Provided guidance and training to students on project execution, imparting essential skills and knowledge in embedded systems development. Conducted workshops and sessions to enhance students' understanding and proficiency in relevant technologies.

Proficiency in Arduino IDE and Proteus: Leveraged expertise in Arduino IDE and Proteus for simulation purposes during the development phase of embedded projects. Utilized these tools to prototype and validate designs.

Embedded Development with Keil Vision 4: Demonstrated proficiency in Keil Vision 4 for developing projects based on ARM Cortex architecture.

Raspberry Pi Pico Integration: Successfully incorporated Raspberry Pi Pico into project development, leveraging its capabilities for embedded applications. Developed and executed projects utilizing the versatile features of Raspberry Pi Pico microcontroller board.

Skills

- Embedded C-** Embedded C programming, with expertise in Atmega328p and developing firmware for real-time embedded system projects, And a strong foundation in embedded systems development
- ARM architecture-** particularly with regards to LPC1768 and LPC1769 microcontrollers, including peripheral interfacing and low-level hardware interactions.
- STM32-**Hands-on experience with STM32F446RE microcontroller in embedded systems development, including peripheral interfacing and firmware development.
- Communication protocols-** such as UART, SPI, I2C, and CAN bus, with hands-on experience in integrating these protocols into embedded systems.
- C, C++-** Familiarity with C and C++ programming languages, enabling seamless integration of firmware with higher-level software components.
- Python-** Proficient in Python for scripting, automation, and testing purpose.
- Raspberry Pi-** Raspberry Pi to create DIY projects and prototypes and Arduino IDE for rapid prototyping and development of embedded systems projects.
- Proteus, Keil uVision4-** simulation and testing of embedded systems using Proteus, proficient in Keil uVision4, facilitating the development and debugging of firmware for ARM-based microcontrollers.
- ROS-** ROS (Robot Operating System) and Gazebo simulation environment, enabling the development and testing of robotics applications.

Education

2020-08 - 2023-07	Bachelor of Technology: Electronics and Communications Engineering <i>Narasimha Reddy Engineering College – Hyderabad</i>
2017-06 - 2020-05	Diploma: Electronics and Communications Engineering <i>Govt.polytechnic College – Narayankhed</i>
2016-06 - 2017-03	SSC <i>TSSW RES Girls School – Medak</i>

Academic Projects

- 1.SMART AGRICULTURE
- 2.SMART HOME MONITORING SYSTEM