Vamshi Chinthakindi

Futuristic & forward-looking professional with track record of striving in uncertainty, curiosity & challenges; targeting to further develop technical expertise and take on leadership responsibilities and contribute towards the growth of the organization





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Executive Profile

- A result-oriented professional, offering over 6 years of experience in the IT industry
- Foundation in firmware development, device drivers, and sensor drivers, with a keen focus on implementing rapid prototyping techniques and actively participating in hardware design discussions
- Proven track record of success in embedded C, C++, RTOS, and firmware development
- Skilled in collaborating with cross-functional teams and delivering high-quality results
- Proficient at implementing fixed frequency and fixed duty cycle PWM drivers for BLDC motor speed control and debugging Autosar-based software components
- Expert knowledge of protocols such as UART, SPI, I2C, USB, WIFI, and CAN
- Proficient in technical tools including Simulink, Keil, Mbed OS, SiLabs, and Microchip Studio
- Experienced in integrating products to internet and leverage IOT technology with OTA
- Versatile, high-energy professional, successful in achieving business growth objectives within turnaround & rapid changing environment with excellent communication, people management, analytical and problem-solving skills

Education & Credentials

- Sensor Systems Technology GPA: 1.8

 Karlsruhe University of Applied Sciences, Germany. Completed 94 ECTS credits towards a Master of Science (Feb'16)
- B.Tech. in Electrical & Electronics Engineering Vidya Bharathi Institute of Technology, [NTUH with 73.2% (Apr'12)]

Technical Skills

- Programming Languages: Embedded C, C++, MATLAB
- Protocols: UART, SPI, I2C, USB, WIFI, CAN
- Technical Tools: Simulink, Keil, Mbed OS, SiLabs, Microchip Studio
- Other Subjects: Signal Processing, Image Processing, Machine Learning

Notable Projects

Research Intern: Carl Zeiss AG, Jena, Germany

- Tenure: Sep'14 Dec'14
- Associated with a team for the development of the Optoelectronic based Eye Tracking System

Research Assistant: Fraunhofer IOSB, Karlsruhe, Germany

- Tenure: May'14 Aug'14
- Associated with a team to design the Optical Interference Filter for the application of Hyper spectral imaging in which grape sorting is performed based on sugar concentration

Master's Projects

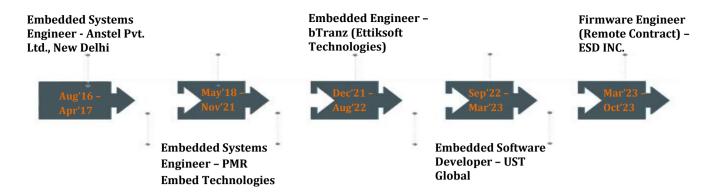
- Apr'15 Jun'15: Fiber Optic Communications
- Oct'13 Feb'14: Acoustic communication for an underwater sensor signal using DSP Modem – Software Defined Radio

Core Competencies









Professional Experience

Firmware Engineer (Remote Contract) - ESD INC. | Mar'23 - Oct'23

- Spearheaded the development of innovative BLE and WiFi based apps on ESP32S3, driving the progress of wireless technology
- Transferred firmware for ATSAMD21J18A, resulting in improved performance and expanded functionality of the product
- Wrote, tested, and debugged code for embedded systems, often in C or C++
- Collaborated with hardware engineers to ensure firmware and hardware components work together seamlessly
- Created and documented firmware architecture & specifications; integrated firmware with the overall system and verified functionality
- Conducted extensive testing, identified and fixed bugs, and optimized firmware performance
- Participated in code reviews & ensured quality and compliance with coding standards; used version control systems to manage code repositories
- Maintained organized documentation for firmware code and updates; developed & released firmware updates and patches as needed
- Resolved technical issues and provided support for product development and production
- Ensured firmware meets industry standards and regulations, especially in safety-critical applications
- Remained up-to-date with the latest embedded systems and firmware development technologies and best practices

Embedded Software Developer - UST Global | Sep'22 - Mar'23

Leveraged extensive knowledge in embedded C, C++, RTOS, and firmware development to produce software solutions of the highest caliber

Embedded Engineer - bTranz (Ettiksoft Technologies) | Dec'21 - Aug'22

- Developed a fixed frequency and fixed duty cycle PWM driver for BLDC motor speed control based on STM32F401RETx Nucleo board, resulting in improvement in motor control precision
- Debugged Autosar-based software components for a linear position sensor using CANalyzer and Trace32, ensuring optimal performance and reliability
- Established RF communication between Si4010 (Transmitter) and Si4355 (Receiver), and developed SPI driver for Si4355 interfacing Nuvoton, enabling seamless wireless communication

Embedded Systems Engineer - PMR Embed Technologies | May'18 - Nov'21

- Contributed to a collaborative effort in designing and implementing a Data Processing Unit and a Milk Collection System utilizing Teensy 3.6 (NXP K66) technology, contributing to the automation and efficiency of the dairy industry
- Successfully integrated Data Processing Unit to internet and made transactions online using WiFi technology (ESP-01, IOT)
- Played an integral role in the development of a precise Digital Weighing Scale utilizing AT89S52 technology, ensuring precise measurements

Embedded Systems Engineer - Anstel Pvt. Ltd., New Delhi | Aug'16 - Apr'17

- Collaborated in the development of a Temperature and Humidity monitoring IoT module based on WIFI (Wemos D1 mini, HDC1080 sensor), enhancing environmental monitoring capabilities
- Most impressive achievement is the development of Over-The-Air update software module

