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EDUCATION

Rohnert Park, CA	**Sonoma State University**	**Fall 2021 - Fall 2023**

- M.S. in Electrical and Computer Engineering, Dec 2023. GPA: 3.67
- Coursework: ̆Embedded Systems design, Linear Systems Theory, Analog and Digital Communications, Microprocessor and System Design, Introduction to Internet of Things, AWS and cloud programming, RF and Microwave design.

Ahmedabad, GJ	**Gujarat Technological University**	**Fall 2016 - Fall 2020**

- B.S. in Computer and Engineering Science, Dec 2020. GPA: 3.60
- Coursework – Basic electronics, Microcontroller and processor design, Introduction to C, Object oriented programming, Theory of computation, Engineering math, C++ programming, Software engineering.

Skills

- Languages: C, C++, HTML
- Microcontrollers: STM32F401RE, PIC18F45K50, ESP8266 and family
- Protocols: I2C, SPI, UART, ADC
- Libraries: HAL API driver development, FreeRTOS
- Driver Development ARM Cortex M Bare Metal programming from ground up (Certification)
- Software: Github, Matlab, ADS, Mysql, Git
- Software Tools: STM32CubeIDE, STM32MX, MPLAB, ArduinoIDE, VSCode
- Instruments: Oscilloscope, Logic Analyzer

PROJECTS

RTOS Based Breath Data Collection Device (C/C++, FreeRTOS) Github	**Spring 2023 - Fall 2023**

- Designing an embedded system to obtain various health parameters from the breath using C/C++ and FreeRTOS API.
- Developed periodic and aperiodic tasks and implemented signal handling and synchronization methods using FreeRTOS..
- Interfaced 4G Cellular Data Module using I2C Protocol to enable communication with cloud server.

Home Automation System (C, PIC18F46K20 MCU, MPLab) Github	**Spring 2022 - Summer 2022**

- Developed device drivers in C for LCD, relay module and Bluetooth Module. Interfaced these devices with the controller.
- Developed bare metal code in C to control various peripherals attached to the MCU using Bluetooth and successfully displayed their status on the LCD screen.

EXPERIENCE

Software Engineer	**BSP Technologies**	**Fall 2020 - Fall 2021**

- Developed dynamic and interactive web applications using technologies such as PHP, HTML, CSS, and MySQL, ensuring efficient and responsive user interfaces.
- Engaged in training and PHP crash course with lead development engineer.
- Collaborated with cross-functional teams to design, implement, and deploy a live website, achieving seamless functionality and high performance on a production server.
- Maintained meticulous documentation throughout the design process, ensuring accurate and organized records for future reference.