ANJALI MURALI

Anjali.Murali@colostate.edu • linkedin.com/anjalimurali • anjali-murali.github.io

EDUCATION

M.S. Computer Engineering　　　　　　　　　　　　　　　　　　　　Expected May 2025
Colorado State University, Fort Collins, CO, USA
Relevant Courses: Introduction to Artificial Intelligence (CS440), Embedded Systems and Machine Learning (ECE528)

B. Tech Electronics & Biomedical Engineering　　　　　　　　　　　August 2015 - July 2019
Govt. Model Engineering College, Cochin, India　　　　　　　　　　　　　　　　　8.09/10 GPA

TECHNICAL SKILLS

Programming Languages: Python, C/C++, MATLAB
Software Tools: Eclipse, Keil, STM32 ST-LINK Utility, SEGGER, PyCharm
Communication Protocols: I2C, UART, SPI, DALI, BLE
Operating System: Windows, Linux
Server Tools: GIT, JIRA
Machine Learning Frameworks: Tensorflow, Keras

PROFESSIONAL EXPERIENCE

WiSilica, Cochin, India: Embedded Software Engineer　　　　　　August 2019 - February 2023

- Designed, developed and validated embedded software blocks within WiSilica IOT device platform.
- Collaborated with core engineering teams on system-level investigation, issue tracking and resolution.
- Participated in the definition of both functional and non-functional requirements of the system and translated those into software in line with project vision.
- Reduced development time and bugs in release cycles by refactoring parts of code base and tools.
- Created portable code for bare-metal and RTOS based solutions across multiple MCUs using embedded C.
- Revamped device production support scripts and test firmware to reduce production process time by 50%.

ubio Biotechnology Pvt Ltd, Cochin, India: Project Intern　　　　　June 2018 - July 2018

- Assisted in developing a prototype of a fully automated portable low cost fluorescent reader for rapid test of Dengue disease.
- Built a GUI enabling patient detail entry for the patient management system using python tkinter, and added functionality allowing sample cartridges to be moved through the analysis equipment using stepper motors, improving usability.

RELEVANT PROJECTS

Connected lighting control system　　　　　　　　　　　　　　　　　　　　　　WiSilica

- Worked on a proprietary BLE wireless network for control of RGB, CCT based smart lighting devices.
- Enhanced existing features and developed new firmware solutions that enabled the launch of new connected lighting products, functionality and services.
- Ported proprietary BLE mesh to nRF5 SDK FreeRTOS based solution.
- Evaluated and integrated new technologies to WiSilica lighting control system.
- Reduced time taken for device OTA updates by 90% through scheme modifications that improved throughput.

Real time location system for indoor tracking　　　　　　　　　　　　　　　　WiSilica

- Worked on a BLE RSSI based indoor tracking and alerting system for efficient asset utilization and enhanced safety.
- Performed device bring up and power optimization for tag, listener.
- Developed tag to listener to gateway BLE messaging protocol.
- Created a linux based tag simulator application for performance evaluations which resulted in easier development and test setups.

Non-invasive Knee Osteoarthritis Diagnosis　　　　　　　　　Govt. Model Engineering College

- Developed a prototype for diagnosis of arthritis by acquisition, processing and classification of Vibroarthrographic signals from knee joints of patients.

VOLUNTEER WORK

Make a Difference: Academic Support Volunteer　　　　　　　　　　July 2019 - June 2021

- Provided academic support in Chemistry, Physics, and Mathematics to high school (Grade 11 & Grade 12) students.