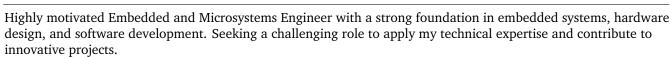
Devi Surya Teja Chilukuri

Regensburg, Germany | suryachilukuri@protonmail.com | +49 176 82 035 963

Website: dst202 | Linkedin: surya chilukuri | Github: dst202

Profile



Experience

March 2024 – present

Dissecto GmbH, Regensburg DE

- Development of RP2040 microcontroller based JTAG and SWD debugger with OpenOCD compatibility
- Implementation of Automated security scan test using JTAG of developed debugger
- Integration of RP2040 debugging functionality into Dissecto's HYDRA probe for remote automated tests
- Currently in the process of adding compatibilty for Automative NXP microcontroller

Intern Pre-development

March 2023 - Sept 2023

Vitesco Technologies AG, Regensburg, DE

- Development and Simulation of intelligent capacitive DC-DC based control topologyusing Simulink and LtSpice to reduce voltage drop ripple in automotive power supplies to less than 1 ms
- Scaling topology and hardware for development of prototype device
- Prototype design using KICAD for PCB and Cube IDE for STM32L053 to implement switching in topology
- Validation of prototype with transient load to measure and test the capacity of prototype

Trainee March 2018 – June 2018

Silicon Touch Technologies, Vijayawada, IN

- Learned and Participated in Arduino and STM32 microcontroller programming and various sensors
- Worked on the development of a voice-activated alarm system using Raspberry Pi
- Utlising API's and ESP dev board to send data to cloud from sensors

Education

Ostbayerische Techincal Hochschule Regenburg

Sept 2021 – present

M.Eng in Electrical and Microsystems Engineering

- Coursework: Multiprocessors and Multicore Embedded systems, Fiberoptics, Optoelectronics
- GPA: 2.3 (Transcript)

VR Siddhartha College of Engineering

Aug 2016 - March 2020

B.Tech in Electrical and Electronics Engineering

- Coursework: Embedded Systems design with RTOS, DC-DC converters, Digital signal processing, Microcontrollers programming with C, Control systems
- GPA: 2.7 (Transcript)



Projects

Fiber Optic SFP to USB Adapter

github SFP-USB

- Design and development of USB to fiber adapters using SFP modules to enable high speed data transmission over fiber networks
- This project includes hardware design, PCB layout, signal integrity analysis and firmware development to achieve reliable and efficient data conversion.
- Tools Used: KICAD, Wireshark, Linux(Ubuntu), C

Low Cost Automated Energy billling with Variable traiff slab

github A.E.B

- Design and simulation of circuits for measuring voltage, current and power factor
- Hardware design of the final design with EAGLE and integration with IOT with ThingSpeak for data collection and tariff calculation
- Tools Used: Proteus, Arduino, EAGLE, C

Intelligent garden monitoring system

2018

- Development of Automated Irrigation and fertilization systems for the garden
- Integration of weather data via weather API to optimise plant growth
- Tools Used: STM32, Cube IDE, C ,Open Weather

Skillset

Languages: C, PythonScripting: Bash, Yaml

Software: VS Code, Eclipse, Cube IDE, OpenOCD Git, KICAD, Scapy

Others: RTOS, Linux, Docker, Proxmox,

Languages

Beginner: German **Fluent:** English