


# Dhana Venkata Siva Sai Kondapalli

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 Stockholm, Sweden

## PROFESSIONAL SUMMARY

Curious and results-driven software developer with a strong foundation in embedded systems, hardware-software integration, and end-to-end verification. Experienced in C/C++ development, adept at testing, debugging and refining embedded applications to optimize performance and efficiency. Familiar with 5G ORAN, Cloud RAN, and real-time system optimization. Committed to continuous improvement, refining processes, and driving efficiency. Recently earned a Master's degree in Electrical Engineering with a specialization in Embedded Systems. Now I am seeking opportunities to apply and expand my expertise in real-world applications.

## EXPERIENCE

### Software Engineer Intern - 5G OpenRAN & IoT | Firecell, Sundsvall, Sweden Jun 2023 – Sep 2023

- Contributed to developing an open-source 5G OpenRAN project by implementing enhancements in system performance and network configuration, utilizing Git for version control to manage collaborative code changes.
- Developed and optimized low-level embedded Linux-based software for real-time video data processing on the Raspberry Pi4 with the help of 5G, utilizing C/C++ and bash scripting to improve system performance by 20%.

### Technical Project Consultant | Kinich IT Labs, Hyderabad, India Sept 2021 – Jul 2022

- Collaborated with cross-functional teams to gather requirements and define project scope and objectives, ensuring alignment with client needs and technical feasibility.
- Supported the scrum process by contributing to sprint planning and stand-up discussions.

### Embedded Developer | Spring Comfort (Mattress Manufacturer), Samarlakota, India Jan 2016 – Mar 2017

- Worked on device integration by developing basic device drivers and interfacing with various hardware components, including sensors, actuators, and motor controllers. This involved utilizing hardware interfaces like I2C and SPI.

## MASTER'S PROJECT - at Mid Sweden University

### Thesis - Adaptive Energy Management for BLE Nodes Using Indoor Light Harvesting

| C/C++, MATLAB, RTOS

- Designed and implemented a Bluetooth Low Energy (BLE) sensor node powered by indoor light harvesting, utilizing the EFR32BG22 silicon chip with an innovative energy harvesting system and super-capacitor storage.
- Integrated sensor drivers and optimized device performance for IoT applications.
- Enhanced energy efficiency in lower energy modes through real-time data analysis using RTOS.
- Acquired expertise in continuous integration and testing processes for validating energy efficient operations, including troubleshooting issues related to real-time data analysis

### AI/ML-Driven Damage Detection in Concrete Using Acoustic Emissions

| TensorFlow, Arduino Nano, Python

- Integrated machine learning model into embedded systems, from training to deployment on a MCU platform.

### Metrology Station associated with FPGA based on System-On-Chip

| VHDL, Petalinux, Zynqberry Platform, Vivado

- Implemented a system capable of monitoring sensor data using the web interface.


### PCB Design Work

| EasyEDA Software, PCB

- Translated 2D schematics into 3D PCB layouts, ensuring correct connections and no electrical or physical conflicts.
- Followed design rules for manufacturability, reliability, and specification compliance.



 github.com/KDVSS

 linkedin.com/in/dhanavenkatasivasai/

## SKILLS

### Programming Languages

- C/C++, Bash Scripting.

### Testing & Development Tools

- Unit Testing, GitHub, Jenkins, VSCode, Eclipse, EasyEDA (PCB).

### Software & Platforms:

- Linux, TensorFlow (AI/ML), MATLAB, RTOS, Arduino.
- Experience in Software Integration & Verification.

### Project Planning & Coordination

- Agile (Scrum/Kanban), Jira.
- Cross-functional Team Collaboration.
- Active-listening, Knowledge Transfer.
- Problem-solving, Explaining complex topics in simple terms.

## EDUCATION

### Mid Sweden University, Sweden.

Aug 2022 – Oct 2024

Master's in Electrical Engineering

### Jawaharlal Nehru Tech. Univ., India.

Aug 2017 – Jun 2019

Master of Business Administration

### Pragati Engg. College, India.

Aug 2011 – Jun 2015

Bachelor's in Electronics and Communication Engineering

## LANGUAGES

English



Swedish

