SHASHANK SIMHA M R

Avid Worker, Tech Enthusiast

@ shashank.simha@ieee.org   ☎ +91 9482038408   % simha.me   ⍟ github.com/shashank-simha

WORK EXPERIENCE

Summer Research Intern

Indian Institute of Science   📅 June – July 2019

- Worked on Implementation of Trilateration algorithm (based on RSSI) on TI-RSLK.
- Developing a self localizing robot using Robot System Learning Kit and Zigbee module.
- Successfully demonstrated the project at TI-RSLK(Max) launch event.
- Technologies:
  Embedded C, Zigbee Communication, MSP432, RSL kit

LEADERSHIP EXPERIENCE

Hub Incharge - Mysuru

IEEE Bangalore Section SAC   📅 May 2019 – Present

- Leading Website team for SYWL congress and Coordinating Website task force. Working for Collaboration Events among IEEE Student Branches.

Student Coordinator

IEEE India Council   📅 March 2019 – Present

- Been a part of Student Co-ordination Team, Worked for Online Training and Webinar team, Leading the website team for AISYWC'19.

Vice-Chairperson

NIE IEEE Student Branch   📅 June 2018 – May 2019

- Led a team of 13 members, organizing over 70 events and 4 technical fests. Developed 2 Android apps and a Website for Events.

SKILLS

Embedded Systems:

- Microcontrollers and Microprocessors: 8051, x86, Atmega, Arduino, ESP 8266, ESP 32, Raspberry Pi, STM 32 etc.
- Programming Languages and Tools: Assembly, Embedded C, Arduino, MicroPython, Keil uVision, Proteus
- Kernel Programming, Shell Scripting and Real Time Operating Systems(RTOS)
- Communication Protocols
- Sensors, Actuators and Peripheral hardware
- Electronic Circuit Board (or PCB) design and troubleshooting

Computer Programming:

- Programming Languages: C, C++, Python, PHP
- Full Stack Web Development
- Databases: MySQL, MongoDB, PostgreSQL, Firebase
- Frame works: Laravel, Flask, Bootstrap
- Android Development
- Computer Networks (IP Networking)

SUMMARY

A skilled multi-tasker passionate about Cyber-Physical Systems, Embedded Systems and Internet of Things.
Looking for opportunities to hone my skills to ensure my professional growth and benefit the organization

EDUCATION

Bachelor degree

National Institute of Engineering

📅 Aug 2016 – May 2020   📍 Mysore, India

- Major: Electronics & Communication
- CGPA: 9.05 (6 semesters)

PROJECTS

Sboot

- A custom bootloader for STM32 Nucleo-F446xx microcontroller boards.
- github.com/shashank-simha/Sboot

FreeRTOS Projects

- Implementation of various features of FreeRTOS on ESP32 microcontroller.
- github.com/shashank-simha/RTOS-Projects

NIE Summer of Code (Projects on ESP 32)

- Web server, Bluetooth SD card reader, Remote Temperature logger, OTA, Web Client, etc. implementation on ESP32.
- github.com/shashank-simha/NSoC5.0

ECG Data Reduction Algorithms

- Implementation of AZTEC, TP and DCT algorithms for reducing the size of ECG data.
- github.com/shashank-simha/ECG-Compression

ACHIEVEMENTS

Best Website Award

- AISYWC'18.

Secured state wise 2nd rank

- National Means cum Merit Scholarship Exam (2011).

ACTIVITIES

- Cadet - National Cadet Corps (NCC)
- State level Swimmer