# BARATH KUMAR R

Phone: +91-9442389587 | +91-7708680516 Email: sivabarathkumar28@gmail.com linkedin.com/in/barath-kumar-r-38b76b1b3 With a motive to learn new things every day, my professional and personal interests match. I am looking for opportunities to keep challenging myself and gain valuable insight on innovative technologies.

#### **EXPERIENCE**

## Product Development Engineer at Centrado Tech Solutions Pvt. Ltd.

August 2020 - May 2021

- Responsible for setting up of IOT, Surveillance Drone and 3D Printing Labs (Atal Tinkering Labs) in 20+ schools as part of NITI Aayog, a Govt. of India initiative
- Developed multiple IOT projects using educational microcontroller boards like Arduino and Raspberry Pi
- Guided a team of faculty and instructors to learn and execute microcontroller paradigms in a lab environment and enable students to participate in various national level competitions
- Collaborated on SEO and other Digital Marketing activities for the company
- Worked on the company's e-commerce website redesign using Wordpress

# **EDUCATION**

# Bachelor of Technology in Electronics and Instrumentation Engineering SASTRA Deemed to be University, Thanjavur, Tamil Nadu | CGPA: 6.566

2016 - 2020

Courses: Digital Electronics, Signals and Systems, Microcontrollers, Microprocessors, Sensors and Signal Conditioning, Robotics and Automation, Digital Signal Processing, Biomedical instrumentation

#### PROJECTS AND PUBLICATIONS

# Smart Weather Monitoring System

Embedded C | STM32F401RBTx Microcontroller

- Built a low-latency weather monitoring system using the UART protocol
- Provided backend cloud server integration and GUI support

# Obstacle Avoidance Robot using Raspberry Pi

 Robotic model that navigates in unknown environments avoiding collisions as a primary requirement for any autonomous mobile rovers

#### On-road vehicle detection and classification using a Machine Learning approach

• Developed a real-time detection and classification of on-road vehicles

#### AREAS OF INTEREST

- Internet Of Things
- Embedded Systems
- Digital Marketing

#### **CERTIFICATIONS**

#### **Embedded Systems Trainee**

Kernel Masters

### **Python Programming**

University of Michigan | Coursera

#### Introduction to Git and Github

Google | Coursera

#### TECHNICAL SKILLS

# **Programming Languages**

- C
- Embedded C
- 8085 MCU Assembly Language
- Linux System Programming
- Bash scripting
- Python

#### Softwares and Technologies

- KEIL
- STM32CubeMx
- Git

# **ACTIVITIES**

**Entrepreneurship Development Cell, SASTRA University** Head of Marketing

Organizer of Sankalp - Technical fest, School of Electrical Engineering, SASTRA University

Participant of the Mad Over Marketing and Venture Capitalist Workshops, Eximius, IIM Bangalore

Event Organiser of SASTRA Technology Business Incubator