

# Hariharan Mathavan

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## EDUCATION

### MS IN COMPUTER ENG

BOSTON UNIVERSITY

Expected Jan 2019 | Boston, MA

GPA: 4.0

### B.TECH IN ELECTRONICS & COMMUNICATION ENG

IIT GUWAHATI

2013 - 2017 | Guwahati, India

## COURSEWORK

### GRADUATE

Embedded Systems

Product Design

Software Design

Operating Systems\*

Computer Networks\*

### UNDERGRADUATE

Computer Networks

RF IC Design

Hardware Design

Machine Learning

Data Structures & Algorithms

## SKILLS

### PROGRAMMING

C • C++ • Android • Python • Java

Shell • Verilog • Assembly • HTML

### HARDWARE

Arduino • Raspberry Pi • NodeMCU

BeagleBone • Intel Edison

### SOFTWARE

Matlab • Cadence • Xilinx ISE • LabVIEW

Spice • MultiSim

## LINKS

Github:// [hariharan-m](#)

LinkedIn:// [hariharanmathavan](#)

Website:// [hariharanm.com](#)

Blog:// [hariharansblog.wordpress.com](#)

## OBJECTIVE

Masters Computer Engineering student looking for Summer Internship in Embedded Systems, Firmware and Internet of Things.

## EXPERIENCE

### UNIFIED NETWORKS LAB | RESEARCH INTERN

May 2016 - July 2016 | Hanyang University, South Korea

- Investigated routing protocols for IoT networks.
- Developed a simulation for RPL - Routing Protocol for Low Power and Lossy Networks using OMNET event simulator library for C++.

### GINGERMIND TECHNOLOGIES | RESEARCH INTERN

May 2015 - July 2015 | Bangalore, India

- Top 20 in the Intel-DST Innovate for Digital India Challenge
- Prototyped a Navigation cum Personal Assistant for the visually impaired consisting of an Android app and a smartphone add-on device.

## PROJECTS

### DISTRIBUTED COMPUTING PLATFORM

Aug 2017 - Dec 2017 | Boston University

Programmed a robust Distributed Computing Platform for iterative processes in an Agile environment.

### KERNEL MODULE DEVELOPMENT FOR HOME AUTOMATION

Sept 2017 - Dec 2017 | Boston University

Developed a modular home automation system which uses secure Powerline Communication technology for inter-node transmissions.

### FPGA VIDEO SURVEILLANCE | BACHELOR'S THESIS

July 2016 - May 2017 | IIT Guwahati, India

Designed a system which interfaces image sensors and implements a novel Object Tracking algorithm on a Xilinx FPGA.

### TRACKING OF ELECTRIC TRAINS USING PLC

Jan 2016 - April 2016 | IIT Guwahati, India

Engineered an Accident Prevention and Tracking System for electric trains using Power Line Communication.

### VOWEL RECOGNITION IN CONTINUOUS SPEECH

Jan 2016 - April 2016 | IIT Guwahati, India

Researched and implemented an algorithm to differentiate and detect vowels in the English language using Formant Analysis and Linear Predictive Coding on Matlab.

## OTHER ROLES

### TECHNICAL SECRETARY

Dihing Hostel, IIT Guwahati

### CONTENT CREATOR

AllAboutCircuits.com