# Hariharan Mathavan

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# **EDUCATION**

#### **BOSTON UNIVERSITY**

MS IN COMPUTER ENGG Expected Jan 2019 | Boston, MA

# INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI

B.TECH IN ELECTRONICS AND COMMUNICATION ENGG 2013 - 2017 | Guwahati, India

# **COURSEWORK**

#### **GRADUATE**

Embedded Systems Product Design Software Design

#### **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 a Summer Internship with experience in Embedded Firmware, Device Drivers, Computer Networks and Internet of Things.

# **EXPERIENCE**

### HANYANG UNIVERSITY | RESEARCH INTERN @ NETWORKS LAB

May 2016 - July 2016 | South Korea

- Investigated Routing Protocols for IoT networks.
- Developed a simulation for 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 Eye-D, a Navigation cum Personal Assistant Solution for the Visually Impaired consisting of an Android App and a smartphone add-on.

# **PROJECTS**

#### **DISTRIBUTED COMPUTING PLATFORM** | Course Project

Aug 2017 - Present | Boston University

Agile Development and testing of a robust Distributed Computing Platform for iterative processes for public use.

#### FPGA VIDEO SURVEILLANCE | BACHELOR'S THESIS

July 2016 - May 2017 | Prof. Gaurav Trivedi, IIT Guwahati, India Part of a three man group which developed an ASIC for interfacing Image Sensors tracked objects using a novel Object Tracking algorithm on a Xilinx FPGA.

#### TRACKING OF ELECTRIC TRAINS USING PLC | Course Project

Jan 2016 - April 2016 | Prof. A.Chatterjee, IIT Guwahati, India Engineered a system for Accident Prevention and Tracking of electric trains using Power Line Communication.

#### **VOWEL RECOGNITION IN CONT. SPEECH | COURSE PROJECT**

Jan 2016 - April 2016 | Prof. P.Guha, IIT Guwahati, India

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

# **AWARDS**

2013 Top 700/500K KVPY(by Dept. of Sc. and Tech., India) Fellow 2009 Top 900/1M NTSE(by NCERT, India) Scholar

# POSITIONS OF RESPONSIBILITY

2015-16 Head of Social Media Alcheringa, IIT Guwahati 2015-16 Content Creator AllAboutCircuits.com 2014-15 Technical Secretary Dihing Hostel, IIT Guwahati