

## Contact Information

### Email

vijathanga@gmail.com

### Address

Block 519 Flat #09-617, West  
Coast Road, Singapore 120519

### Phone

+65 81329960

## Skills

- Python
- C/C++
- Embedded C
- node.js
- Verilog
- Networking
- Embedded Systems
- Linux
- MATLAB

# Vijayanand Thangavelu

Dedicated and enthusiastic engineer eager to explore the realm of networking, software development and machine learning. A reliable hard worker who proves himself in each situation.

Linkedin Profile: <https://www.linkedin.com/in/vijayanand-thangavelu-8124657b/>

## Experience

### Cisco Systems ● Software Engineer

Bangalore, India

August-2015

June-2017

- Application developer for Network Access Control software (ISE Posture) for Mac and Windows platform
- Additionally developed few productivity tools for enhancing software development
- Worked in technologies like C, C++, nodejs and python

### Cisco Systems ● Intern

Bangalore, India

January-2015

June-2015

- Developed a distributed storage framework prototype for the application Identity Services Engine (ISE)
- Worked in technologies like HBase, CouchDB and Java

## Education

### PSG College of Technology ● Bachelor of Engineering (Electronics and Communications)

India

2015

CAP: 9.80/10 (Passed with distinction and Batch topper)

### National University of Singapore ● Master of Science (Electrical and Computer Science)

Singapore

2019

CAP: 4.2/5\* (Still pursuing)

## Projects

### A Novel approach to securing IoT devices using SDN and Machine Learning

- Various IoT devices are classified into different classes by learning their network traffic pattern.
- SDN and Machine Learning are used in parallel to detect and prevent malicious traffics in IoT networks

### **Parallelization of Neural Networks in Software and Hardware**

- Performance analysis of Neural Networks parallelization using OpenMP and CUDA.
- Analysis of hardware acceleration of Neural Networks through FPGA.

### **Fingerprinting of IoT Devices: A distributed approach**

- Implemented a two stage classifier for automatically fingerprinting new IoT devices.
- Used semi unsupervised model for detecting and classifying new devices.

### **Pain detection using EEG**

- The aim of this project is to build a circuit that detects pain signals by analyzing EEG waves of brain
- During pain, the EEG waves are characterized by certain properties, which the circuit detects.

### **Speech Assistance for mute people**

- The aim of this project is to build speech aid for mute people by interpreting sign language
- Sign languages were recognized by hand gestures and processed into words through computer

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### **Certifications & Courses**

- Cisco Certified Network Associate (CCNA) – Routing and Switching
- Machine Learning Course by Andrew NG, Coursera

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### **References**

Mr. Sandeep Kumar  
Manager  
Cisco Systems Put Ltd, Bangalore  
Email: sankuma2@cisco.com

Relationship: Manager at Cisco