Vijayanand Thangavelu

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE
MSc in Electrical & Computer Science
2017 - 2018 | Singapore,
CGPA: 4.7/5

PSG COLLEGE OF TECHNOLOGY
BE in Electronics & Communications
2011 - 2015 | India,
CGPA: 9.8/10 (batch topper)

LINKS

Github:// **vijathanga**
LinkedIn:// **vijathanga**

COURSEWORK

GRADUATE

Multiprocessor Systems
Real Time Systems
Advanced Computer Networks
System Security
Embedded System Design
Visual Computing

UNDERGRADUATE

Operating Systems
Computer Architecture
C++ and Datastructures
Embedded Systems
Computer Networks

SKILLS

PROGRAMMING

Well-versed:
Java • Shell script • Python
C/C++ • Groovy

Familiar:
node.js • SQL • Javascript
Embedded C

TECHNOLOGY

Linux • Dockers • Spark
Jenkins • ML • Hadoop
IoT Security • Networking

EXPERIENCE

VISA INC | Sr Software Engineer
Jan 2019 – Present | Singapore

- Involved in developing Spark application on Java with Hive back end.
- Developed CICD pipelines for build, deployment and security scans for services and applications.
- Developed CICD as Service on Python-Flask to automate pipeline creation.

SINGTEL - NUS | Graduate Student Researcher
Feb 2018 – Nov 2018 | Singapore

- Developed distributed framework for NFV deployment on network edges.
- Designed and implemented distributed device fingerprinting and anomaly detection for IoT devices on network edges.

CISCO SYSTEMS | Software Engineer
Aug 2015 – Aug 2017 | Bangalore, India

- C/C++ application developer for AnyConnect ISEPosture - an enterprise grade Network Access Control (NAC) software for both Mac and Windows.
- Contributed to next-gen posture discovery - mechanism for client to locate NAC server when it connects to enterprise network.

CISCO SYSTEMS | Software Engineer Intern
Jan 2015 – June 2015 | Bangalore, India

- Aided in testing various distributed storage technologies for application Identity Services Engine (ISE).
- Developed node.js based server simulator to help test client code.

PROJECTS

DISTRIBUTED DEVICE FINGERPRINTING (PYTHON) | MAY 2018
A distributed framework in python for classifying and dynamically learning new IoT devices using supervised & semi-supervised ML algorithms. Got exposure on distributed computing, containers, machine learning and socket programming.

IDENTITY SERVICE ENGINE SIMULATOR (NODE.JS) | Dec 2014
Simulator for a Network Access Control server (ISE). Client- server handshake, secure communication and web UI were some of the features implemented. Got hands on knowledge on REST API, cryptography and websockets.

PUBLICATIONS

DEFT: A DISTRIBUTED IOT FINGERPRINTING TECHNIQUE
August 2018 | IEEE Internet of Things Journal | Volume 6, Issue 1

NETRA: IOT SECURITY USING NFV EDGE TRAFFIC ANALYSIS
February 2019 | IEEE Sensors Journal | Early Access

PATENT

A System and Method for Identification of Internet of Things (IOT) Devices Based on a Distributed Fingerprinting Solution
July 2018 | Patent pending

CERTIFICATION

CISCO CERTIFIED NETWORK ASSOCIATE (CCNA)
Feb 2016 – Feb 2019 | ID: CSCO12938457