## MARMIK PANDYA

10C McGreevey Way, Boston, MA-02120 | 617-858-9283 | pandya.m@husky.neu.edu https://github.com/marmikcfc | https://www.linkedin.com/in/marmikpandya

#### **Education**

## Northeastern University, Boston, MA

Sept 2015 - Dec 2017

Master of Science in Computer Science (GPA: 3.67)

Coursework: Artificial Intelligence, Wireless Networks, Computer Systems Security

# **Projects:**

- Designed, developed and tested the Artificial Intelligence Codebase for Pacman as well as Ghosts for the MS Pacman Vs Ghost Framework. Also developed my own Genetic Decision Tree Algorithm for Pacman.
- Designed and developed **LiFi Prototype** and did analysis of performance using various coding techniques like Hamming Code, Manchester Coding et.al. on the channel.

#### University of Mumbai, Mumbai, India

Aug 2010 - May 2014

Bachelor of Engineering in Information Technology

- Coursework: Operating Systems; Databases; Algorithms; Robotics and Machine Intelligence; Computer Vision;
- Designed and developed a python based **AI chess game** where the Computer used Backtracking to determine the best move.

Skills

**Languages:** C, C++, Java, Python, Ruby

Web Technologies: HTML, CSS, Javascript, jQuery, JSP, PHP, AngularJS, Node.js, HTML5, CSS3, Backbone.js,

Ruby On Rails and Meteor.js.

Mobile Technologies: Native Android development, Ionic Framework, Cordova

Database Systems: MySQL, SQLite, Microsoft Access, MongoDB, Teradata, ORACLE/PL SQL, Informatica

Powercenter, Firebase, Redis.

Additional: Arduino uno, Raspberry pi, Linux, OpenCV, AWS, Network Security, Cryptography

#### **Work Experience**

#### University of Mumbai, Mumbai, India

#### **Software Developer**

**Aug 2014 – Aug 2015** 

- Developed and deployed a web based application similar to Blackboard, for the students of the University of Mumbai using PHP, AngularJS, NodeJS etc.
- Ensured scalability of a high traffic web application by providing virtualization layers through Docker containers.
- Was covered in national newspapers for my work with the university [http://www.dnaindia.com/india/report-four-students-show-mumbai-university-how-exam-house-should-function-2115893]

Capgemini, Mumbai, India

## **Software Engineer**

Aug 2014 - Nov 2014

- Underwent training in ETL track (alongside Teradata and SAP BO) mastering Orcale/PL SQL and Informatica.
- Telia-Sonera Data warehousing project: Worked on ETL side of the project.

#### Larsen & Toubro Infotech, Mumbai, India Project Trainee

**Sept 2013 – May 2014** 

- Researched on the required company oriented standards for all the WSDL documents generated.
- Built an automated WSDL and XML validation tool that worked on L&T company standards.

#### **Publications**

- Java Based XSD, XML AND WSDL Validation Tool <a href="https://goo.gl/d5mhWK">https://goo.gl/d5mhWK</a>
- Securing Clouds The Quantum Way <a href="http://arxiv.org/abs/1512.02196">http://arxiv.org/abs/1512.02196</a>

### **Side Projects**

- **Co-founded 'engineerpond.com'** an e-commerce website that provides platform for engineering students where outgoing students can sell stuff from previous year to incoming students. Worked on both the front-end and the backend aspects of the website using PHP and MySQL.
- **Snaplify:** Designed and developed a prototype Visual Search Engine Android app using Ionic Framework and Node.js for the RESTful backend. The app was designed and built within 36 hours at YHacks 2015.
- **OpenDNA:** Developed a web based, open source tool for DNA analysis using Node.js and Meteor.js framework. The app was designed and built within 24 hours for the Meteor Global Hackathon 2015.
- **Code Cloud** an open source cloud based IDE that currently supports on C/C++ development. It is deployed on Openshift.
- **NodeDB:** Worked on an experimental, in memory, NoSQL, Key-Value Data store for Node.js application. Used B-Trees to store the data.
- **shortencmd**: Since Windows doesn't allow bash aliasing built an Open Source cross platform bash aliasing tool.
- **Pokedex**: Developed a simple Content Based Image Retrieval System (CBIR) in Python using OpenCV.
- Accelerometer controlled Robot using Arduino Uno, L293D IC circuit, ADXL335 Accelerometer.
- Smart Fridge System: Working on Smart Fridge Internet of Things system using CAFFE for object recognition and Orange pi