# PALASH ASHOK BHATIA

14 Grant Ave, East Newark, NJ-07029

+1 (646) 240 0939 Email: pab39@njit.edu LinkedIn: www.linkedin.com/in/palashbhatia/ Web: www.palashbhatia.com GitHub: https://github.com/palash-b

Computer Science Graduate Student at New Jersey Institute of Technology seeking Full Time/Co-op opportunities starting Spring 2018.

#### **Education**

**Master of Science-Computer Science** 

New Jersey Institute of Technology, Newark, NJ

**Bachelor of Engineering- Electronics and Telecommunication** 

Maharashtra Institute of Technology, Pune, IND

Graduation: May 2018 (Expected)

GPA 3.3/4.0

Graduation: May 2015 First Class with Distinction

### **Relevant Courses**

Cognitive Computing, Capstone Master's Project, Data Mining, Cloud Computing, Internet & Higher Layer Protocols, Java Programming, Data Structures & Algorithms, Operating System, Database Management & System Design, Computer Programming Languages.

#### **Technical Skills**

Programming Languages: JavaScript, Node.js, C, Java, Python, C++, SQL, NoSQL, HTML5, CSS3, Embedded C, Assembly and VHDL.

Softwares/Technologies: AWS Lambda, AWS EC2, AWS EMR, AWS Alexa, R studio, MongoDB, IntelliJ, MySQL, Sublime Text and Matlab.

Operating Systems: Microsoft Windows, Linux and Mac Os X.

Tools: Git & Github, Orange, Yacc, Wireshark, ARC, FFMpeg, Lex, GDB, Trello, Flowdock, Slack and MS Project.

### **Work Experience**

## **Software Developer - Application Development** at International Motor Group (Capstone):

September 17 – Dec 17

- Built automated business intelligence modules/services in the form of a web application with Node.js and designed Rest API for application integration hosted on AWS EC2 and MySQL for scaling, designing schemas, storing and querying the JSON obtained/created.
- Awarded team champion and ranked amongst the top 5% of the program metrics for demonstrating exceptional performance at NJIT.

### Global Product & Technology Intern – Product Development at ADP, LLC:

*June 17 – August 17* 

Developed a real-time platform using Amazon Alexa Voice SDK that takes speech as input for ADP shops. The web service application was integrated with AWS Lambda programmed using Node.js. The speech input was processed and requisite data of geographic locations obtained from Google Maps API was mapped, stored, and queried using MongoDB.

### **Systems Integration Engineer** at Dhupar Brothers Trading Pvt Ltd:

June 15 - June 16

Designed home automation solutions by integrating high-performing subsystems for alarms, audio, lighting control with a single, easyto-use app interface for superior control. The design involved whole-house control of entertainment, security, comfort and convenience through Legrand solutions and select third-party components.

# Certification

Microsoft Technology Associate in Networking Fundamentals

February 15

## **Academic Projects**

### **Graduate Coursework:**

Cognitive Computing - Options Trading Strategy:

January 17- May 17

- Constructed a cognitive model to trade and exercise Call & Put options to form a trading strategy for JP Morgan Chase by creating context free BNF grammar using Yacc to parse the HTML data obtained from NASDAQ and extract the options chain sheet.
- Association rules were generated for the sheet that aligns with user-defined support & confidence values using Apriori Algorithm.

# Network based Web Proxy to handle HTTP, FTP requests:

September 16- December 16

Devised a proxy complying with the HTTP/1.1 using Socket Programming developed in C using AFS Linux System. The Proxy was mutated to perform protocol mediation. When a browser receives a FTP request the proxy will parse the request and perform the FTP transaction by procuring the file from the server and return it as a HTTP response.

## Hospital Management System:

September 16- December 16

Developed a GUI based interactive application which simulates the working of a hospital with essentials such as Patient and Doctor Records, Nurse and Ward Boy Information as well as Billing and Room/Ward details. The technologies used were Java and MySQL.

#### **Undergraduate Coursework:**

Intruder Detection using Face Recognition: (Sponsored by Texas Instruments)

August 14- May 15

Formulated real time facial detection and recognition standalone system using Principal Component Analysis, Harr based Cascade Classification, Eigenvectors and Eigen faces, K-Nearest Neighbors and Microcontroller programming. Developed and implemented algorithms in Python using OpenCV Library. Accomplished 88% success in real time facial recognition.

## Image Processing based Vending Machine:

December 13- May 14

Implemented an automated vending machine using Networking and Image Processing techniques. Programmed and designed Coin recognition algorithm using Matlab. Used Embedded C and Atmel Studio for microcontroller programming.

## Recognitions, Awards and Leadership Experience

- President DeepCS & Department Representative for the Technical Community of Ying Wu College of Computing, 2017-18.
- Technology Officer of the Graduate Student Association at NJIT for the academic year 2016-2017.
- Represented NJIT as a Graduate Student Delegate at the United Nations for the Youth Leadership and Peace Summit, 2016.
- Selected for paper presentation at the International Conference on Computational Photography at Rice University, USA, 2015.
- Chairperson of the National Level Technical Festival 'Texephyr', 2015, Vice-President of Cultural Festival 'M.E.R.C.', 2015.
- Head of the Association of Electronics Students at MIT Pune, 2015, 1st Runner's Up at the MIT Pune's 'Best Manager' Event, 2013.