

# PALASH ASHOK BHATIA

215 William Street, Harrison, NJ-07029

+1 (646) 240 0939

Email: [pab39@njit.edu](mailto:pab39@njit.edu)

LinkedIn: [www.linkedin.com/in/palashbhatia/](http://www.linkedin.com/in/palashbhatia/)

Web: [www.palashbhatia.com](http://www.palashbhatia.com)

GitHub: <https://github.com/palash-b>

Computer Science Graduate Student at New Jersey Institute of Technology seeking Fall Co-op opportunities starting September 2017.

## Education

### Master of Science- Computer Science

New Jersey Institute of Technology, Newark, NJ

*Graduation: May 2018 (Expected)*

GPA 3.2/4.0

### Bachelor of Engineering- Electronics and Telecommunication

Maharashtra Institute of Technology, Pune, IND

*Graduation: May 2015*

First Class with Distinction

## Relevant Courses

Cognitive Computing, Internet and Higher Layer Protocols, Java Programming, Data Structures and Algorithms, Operating System, Database Management and System Design. Future Coursework: Data Mining, Cloud Computing, Data Analytics using R and Big Data.

## Technical Skills

- Programming Languages: C, Java, C++, JavaScript, Node.js, Python, SQL, Embedded C, Assembly, VHDL.
- Softwares: AWS Lambda, IntelliJ, Eclipse, MySQL, Atom, Sublime Text, Wireshark, Matlab, Atmel Studio, Xilinx.
- Operating Systems: Microsoft Windows, Linux, Mac Os X.
- Tools: Git, Yacc, FFMpeg, Lex, GDB, Trello, Flowdock.

## Work Experience

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

*June 17 – present*

- 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, easy-to-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 to 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

- Vice President–Administration, elected representative for the Technical Community of the College of Computing Sciences, 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.
- Selected for industry track paper presentation at ICACCI, 2015, Awarded ‘Best Project – Research Track’ at MIT Pune, 2015.
- Participated in Texas Instruments Innovation Challenge IDC and reached the quarter final stage amongst 3100 proposals, 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, 1<sup>st</sup> Runner’s Up at the MIT Pune’s ‘Best Manager’ Event, 2013.