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# **PIYUSH RAO**

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<u>LinkedIn Profile</u> <u>GitHub Profile</u> Portfolio Website

#### **EDUCATION**

### Stevens Institute of Technology, Hoboken, NJ

**Expected December 2017** 

- Master in Computer Engineering, **GPA-3.7**
- Concentration and Graduate Certifications: Software Engineering and Embedded systems

**Course Work:** IoT, Pattern Recognition and Classification, Computer Organization and Programming, Real-Time and Embedded Systems, Computing Principles and Embedded Systems, Special Problems in Electrical Engineering, Digital Computer Architecture

### University of Mumbai, Maharashtra, India

June 2016

Bachelor of Engineering in Electronics

### TECHNICAL SKILLS

Programming Languages: C++, C, Java, Python, Assembly, MATLAB, R, Arduino IDE, Visual Basic, Verilog

Database: MySQL, Oracle, MS-Access, PostgreSQL

Web Technologies: HTML5, CSS3, JavaScript, Twitter Bootstrap, AngularJS, PHP, WordPress, Git, Django

Tools: MS-Excel, MS-Word, MS-PowerPoint, Kibana, Plotly, Tableau

Operating Systems: Windows, Linux, Raspbian, macOS
Certifications: Java, Full stack development

### PROFESSIONAL EXPERIENCE

# Ambiz Corporations, Mumbai, India Junior System Developer Intern

Dec'14-Jan'15

- Developed a prototype to trigger ultrasonic horns fitted on cement silos using an Arduino after specific interval of time
- Designed the hardware circuit using power devices and software with Arduino IDE platform

### **PROJECTS**

# CPU Statistics Data Acquisition, Study, and Analysis, Stevens Institute of Technology

Spring 2017

- Collected data of several CPU parameters like RAM, temperature, number of tasks, and CPU utilization using MATLAB
- Analyzed 86,400 samples each for 3 types of operations, derived relations between the parameters, and plotted graphs using Tableau

### Android Application for Guiding Tourists, Stevens Institute of Technology

Spring 201

- Built an application that allows the user to rate and comment about a tourist spot and to choose them wisely by reading reviews
- The application also provides features like a splash screen, tabular view for sorting places, various filters, pictures, Google maps interface API and login using Gmail, Twitter, and Facebook

### Checklist Application using Android Studio, Stevens Institute of Technology

Spring 2017

- Devised a checklist Android application, containing the list of things a student needs to carry while going abroad for education
- Learned using checkboxes, radio buttons, switches, animation, scrolling and swiping activities in an Android application

### Travel Transaction Panel, Stevens Institute of Technology

Spring 2017 edit/debit

• Realizing that card payment option for a bus ticket does not exist, we successfully invented a prototype portal of a credit/debit transaction using Tkinter GUI library in Python and SQL for Stevens shuttle buses and their stops

## Face Detection, Recognition and Classification using MATLAB, Stevens Institute of Technology

Summer 2017

- Used machine learning algorithms to successfully detect faces and recognize the individuals using HOG extraction
- Detected various facial parts like eyes, nose, and mouth, and matched them using the same algorithm

### Android Application for Converting Speech to Text, Stevens Institute of Technology

Fall 2016

Created an application in Android Studio to convert speech to text using United States English Google library

# RF Based RC Controlled Environment Surveillance UAV, University of Mumbai

Spring 2016

- Administered a team to design a drone used to measure environmental parameter of a location to judge whether it is fit for human habitation by measuring temperature, pressure, humidity, and air quality
- Drafted the circuit and implemented it using various sensors, brushless DC motors, servo motors, and Arduino board

### RF Based RC and Autonomous Floor Sweeper Robot, University of Mumbai

Fall 2015

- Interfaced ultrasonic sensor, servo, and DC motors, and self-made RF module remote control with Arduino board
- Programmed the robot to avoid obstacles on the floor while sweeping and it can switch to remote control whenever user wants
  to clean intricate areas of the room

### ACHIEVEMENTS AND CO-CURRICULAR ACTIVITIES

- Student member of IEEE, CSI (Computer Society of India) and E-Cell (Entrepreneurship Cell, an initiative of IIT Bombay)
- Publicity head of IEEE DMCE (2014-2015)
- 1<sup>st</sup> in IEEE project presentation and technical debate (featured in the IEEE Communique Magazine) and 2<sup>nd</sup> in technical paper presentation
- Top 20 of Indian National Level IEEE Project Presentation competition held by IEEE RAIT
- Volunteer work for NGOs "Urmi" and "Forest Society of India" (2015)
- Black belt in Japanese karate of self defense
- Elementary degree in Indian classical music on mandolin, and can play violin, flute, harmonium, and dholak (intermediate)