PIYUSH RAO

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LinkedIn Profile
GitHub Profile
Portfolio Website
HackerRank Profile

OBJECTIVE

Looking to pursue a career as a Software Engineer by obtaining a full-time job and employing my unique set of skills to solve challenges

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 Skills:	Java (Expert), Python (Expert), C++ (Intermediate), J2EE, JDBC, C, C#, .NET, Assembly, MATLAB, Go, Verilog
Database:	MySQL, Oracle, MS SQL, MS-Access, R, PostgreSQL
Web Technologies:	HTML5, CSS3, JavaScript, JSON, AJAX, JQuery, Bootstrap, AngularJS, PHP, WordPress, Git, Django, Tomcat
Tools:	MS-Office, Visual Studios, JIRA, Bash, Kibana, Plotly, Tableau, Docker, AWS, ThingSpeak
Operating Systems:	Windows, Linux, Raspbian, macOS

PROFESSIONAL EXPERIENCE

Ambiz Corporation Pvt. Ltd., Mumbai, India   **May'14-Jan'15**
Database Administrator and Web Developer Intern

- Assisted in developing, implementing, and deploying the website of Ambiz Group collaborating with a team of Annex Data Systems
- Debugged the Java code, developed JSPs and Servlets, and used JDBC, HTML, and JavaScript to develop a prototype of a small office environment management system
- Designed and maintained the clients and services database using MySQL

PROJECTS

CPU Statistics Data Acquisition, Study, and Analysis, Stevens Institute of Technology (Link)   **Spring 2017**
(**Skills:** MATLAB, Plotly, Tableau, MS Excel, Visual Studio, JIRA)

- Collected data of several CPU parameters like RAM, temperature, number of tasks, and CPU utilization on using MATLAB.
- The data was collected while 3 types of operations/CPU state (idle, web surfing, and online video streaming) were being performed, from 3 different computers with different specifications
- Analyzed 86,400 samples for every operation and derived that despite of the change in specifications, parameters measured have the same behavior for an operation
- Plotted the graphs of the obtained results using Plotly, Tableau, and MS Excel

Android Application for Guiding Tourists, Stevens Institute of Technology (Link)   **Spring 2017**
(**Skills:** Android Studio, Java, XML, SQLite, Visual Studios, GitHub API for Android Studios)

- Built a full-scale application that shows all the potential tourist attraction places in a locality and enables the user to rate and comment about that spot and to choose them wisely by reading reviews
- The application was interfaced with Google Maps API and thus displayed traffic and shortest path to reach the tourist destination
- It also provides features like a splash screen, tabular view for sorting listed places, various applicable filters, pictures of that place, and login using Gmail and Facebook

Checklist Application using Android Studio (GoCheck), Stevens Institute of Technology (Google Play Link)   **Spring 2017**
(**Skills:** Android Studio, Java, XML, SQLite, changing and building Gradle, deploying an application)

- Devised a checklist Android application, containing the list of things a student needs to carry while going abroad for education
- Learnt using checkboxes, radio buttons, switches, image and text boxes, animations, scrolling, and swiping activities in an Android app
- Familiarized myself with shared resources, tabular activities, and splash screens as well as signing and deploying the application

Weather Station using Raspberry Pi, Stevens Institute of Technology   **Fall 2017**
(**Skills:** Python, HTML5, CSS, JavaScript, Django, Flask, MySQL, Shell Script, Fritzing)

- Interfaced Raspberry Pi with DHT11 and BMP180 sensor using I2C protocol and collected data of temperature, pressure, and humidity also stored it in a MySQL database
- Created a server using Django web framework, granted permissions, hosted a website on localhost, and displayed the real-time sensor data on it by interfacing it with MySQL
- Also displayed date, time and used Google Maps to show the location of the Raspberry Pi on the website

Android Application for Converting Speech to Text, Stevens Institute of Technology **Fall 2016**
(**Skills:** Eclipse, XML, interfacing android application with hardware (microphone and speaker) of smartphone)
- Created an application using Eclipse to record speech using microphone of the smartphone and convert it to text using in-built United States English Google library
- Learnt to set up menus, recognizers, and concepts associated with Java such as exception handling and inheritance

Travel Transaction Panel (TTP), Stevens Institute of Technology **Spring 2017**
(**Skills:** Python, SQLite)
- Realizing that card payment option does not exist for a bus ticket, we successfully invented a prototype portal to implement credit/debit card transaction taking into consideration distance and cost associated
- TTP is developed using Tkinter GUI library in Python and SQLite, especially for Stevens shuttle buses and their stops

Face Detection, Recognition and Classification using MATLAB, Stevens Institute of Technology **Summer 2017**
(**Skills:** MATLAB)
- 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

Java RMI Student Query Project, Stevens Institute of Technology **Spring 2017**
(**Skills:** Java, PostgreSQL)
- Created a server and client program using Java RMI library and the database with PostgreSQL and interfaced them
- Server creates the server object, send it to RMI registry to bind it with the database, receives the request from client, searches for the first name in database, and returns the array list pertaining to the first name if found
- Client program gets the server object from RMI registry, first name from user input, and corresponding array list from the server
- It also displays the full name of the corresponding first name

Web Scrapping Air Tickets Booking Website Using Python, Stevens Institute of Technology **Spring 2017**
(**Skills:** Python)
- Web scrapped goibibo.com for checking whether flights for a set of source and destination are refundable or not using Selenium
- Saved the flight name, cost, and refundable status in a csv file also derived relation between them
- Imported the csv file in python and analyzed the data by plotting various graphs like scatter plot, linear regression and cross-validation using python libraries like csv, pandas, and matplotlib library

Go MS – Everything necessary for MS (www.goms.in) **Summer 2017**
(**Skills:** HTML5, CSS3, JavaScript, JQuery, GitHub pages, AWS)
- Developed Go MS website for students from Asian countries to refer as a stepwise guide to follow while planning for MS/PhD degree
- Go MS offer various tips starting with GRE and TOEFL exams to VISA application, also includes minute necessary details like conversion of percentage to 4-scale GPA table
- Hosted the static website using GitHub pages

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)
- 1st in IEEE project presentation and technical debate (featured in the IEEE Communique Magazine) and 2nd 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)