ADITYA DEVENDRA PANDEY

1615 S Cooper St, Arlington, TX 76010
(313)-775-9172
adi.pandeycs@gmail.com

http://adipandey.com/
https://www.linkedin.com/in/adi-pandey
https://github.com/addherbs

Academic Background

Master of Science - Computer Science - GPA: 3.42 / 4.0   Aug 2016 to May 2018
University of Texas, Arlington

Bachelor of Engineering - Computer Engineering - GPA: 7.08 / 10.0   Aug 2012 to May 2016
University of Mumbai, Xavier Institute of Engineering - Mumbai, India

Computing Skills

Programming Languages: Python, Java, C, C++, JavaScript, PHP
Statistical Language Tools: R Programming, MATLAB
Cloud Computing Services: Amazon EC2, Amazon S3, Amazon RDS, Amazon EB, Amazon ElastiCache, IBM Bluemix
Software and Application Frameworks: Flask, Node.js, Android Studio, Hadoop, Linux, Windows
Database: MongoDB, SQL**,** Minibase, Oracle
Basic Knowledge: Firebase, Ruby

Professional Experience

Cloudstrats Technologies, Mumbai, India   June 2016 to Aug 2016

- Developed an Android application "XFix Services", a product of Cloudstrats Technologies which provides the interface between the customers and the services that the company provides.
- Developed a website for the company product "XFix Services".
- Was part of the database Migration project from Gmail to Office365.
- Developed an understanding on Oracle database and analyzed large datasets for projects provided by the company.
- Worked on two projects of developing websites for the clients.

Projects

Behavior Based Fire Extinguisher Robot (Unsupervised) using C++   **Link**   Oct 2017 to Nov 2017
- In a random maze of obstacles and a fire place, this robot manages to detect fire and extinguish it.
- Two touch sensors, one color sensor, one IR sensor and one Gyro sensor were used to detect obstacles and the goal color(fire). A cardboard was clipped to two large motors which was used to extinguish the fire.

Shape Printing Robotic Arm using C++   **Link**   Nov 2017 to Dec 2017
- This robot can print any given shape provided we know the coordinates of the respective shape.
- The robot had two large arms which could cover the V-range between approximately 30 to 120 degree of canvas.
- Basically, the robot can move in 3 different directions; upward, downward and diagonal (angle and slope based).

Image Processing   **Link**   May 2017 to June 2017
- From scratch I developed 4 different image processing algorithms which were; Prewitt template (Horizontal) edge detection algorithm, Cross - convolution template matching image processing algorithm, Blob coloring and detection for images and Image processing using template matching (Convolution, Normalization of template).
- All the 4 algorithms where developed in a progressive way, when given an Image and it returned the processed image after applying the algorithms.

Goal Finder in The Maze with Obstacles (Supervised) using C++   **Link**   Sep 2017 to Oct 2017
- When already having the map/ maze coordinates (supervised) with obstacles and free space to move, the robot finds its way to reach the goal object.
- The robot can move in 4 directions (up/ down/ left/ right) and can rotate 90 degree using Gyro sensor on spot.

Robotic Manipulator Simulator (Forward/ Inverse Kinematics) using C   **Link**   July 2017
- When given a robot with 5 degree of freedom and a theta vector it calculates the forward and inverse kinematics of it.
- The robot can perform 4 actions which are; Translation and Rotation along X/ Y and Z axis.

Machine Learning Projects using Python/ MATLAB/ Java   **Link**   Feb 2017 to May 2017
- It was a progressive term where I developed various ML algorithms from scratch without using any library.
- Some of the algorithms are; Decision trees including Randomized forests, Naïve Bayes, Neural Networks, PCA, Linear and Logistic Regression, SVD, Gaussian estimation etc.
- Some of the datasets used for the algorithms were, Pendigits, Satellite, Yeast and Numeric.

Data Mining using R Programming   **Link**   Sep 2016 to Dec 2016
- Here, I used R programming and its inbuilt tools and libraries to learn, develop and plot (graph) of some of the algorithms.
- I used Titanic dataset to work with Apriori algorithm, Decision trees and Linear Regression.
- Fertility dataset for designing training and testing model for KNN, Support Vector Machines and Naïve Bayes algorithm.

Working With Web Services of Amazon/ IBM/ Microsoft using Python   June 2017 to July 2017
- While working with these web services I learned a lot about the data services, cloud computing, database operations and performance.
- Some of the libraries and concepts that I used were, respective Virtual Machines, JMeter, Boto3, tkinter, Scikit-learn, caching, auto-scaling etc.