

# ADITYA KALYAN JAYANTI

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Graduate student in Computer Science, seeking internship opportunities starting May 2019.

## Skills

### LANGUAGES

Python  
Java  
R

### DATABASE

SQL Server  
MySQL  
CouchDB  
PostgreSQL

### WEB DEVELOPMENT

HTML5  
CSS  
Javascript  
PHP  
Mustache

### OPERATING SYSTEM

MacOS  
Linux (Ubuntu)  
Windows

### SOURCE CONTROL

Github

### TOOLS

VMWare Fusion  
Microsoft Office Suite  
Rattle  
Latex

### CERTIFICATIONS

Machine Learning by Stanford University on Coursera.  
VTC Online Training on Ethical Hacking  
NIIT C, C++ & Data Structures  
Computer Society of India (CSI)

## Education

### Rochester Institute of Technology

Master of Science, Computer Science

Aug. 2017 to Dec. 2019

Coursework: Advanced Object-Oriented Programming, Computational Problem Solving, Introduction to Big Data, Algorithms, Big Data Analytics, Intelligent Systems, Database System Implementation.

### RNS Institute of Technology

Bachelor of Engineering, Computer Science

July 2013 to July 2017

Graduated with Distinction

Coursework: Data Structures with C, Object Oriented Programming with C++, Design and Analysis of Algorithms, Unix & Shell Programming, Operating Systems, Database Management Systems, Computer Networks, Information Network Security, Software Architecture.

## Experience

### Response Care Inc.

Software Engineer Intern

Rochester, NY  
Jan. 2019 to Current

- Fixed bugs and production issues using the standard front-end stack.
- Worked closely with a team of UI developers and testers to implement UI modules.
- Created application layout/user interfaces by using HTML5, CSS3, Javascript, PHP, jQuery, and PHP.
- Involved working collaboratively through agile development.

## Projects

### Data Analysis of New York City Motor Vehicle Collisions

Nov. 2018 to Dec. 2018

Skills used: Tableau, R, Python

- Used data mining techniques to uncover the trends in data between 2017 & 2018
- Developed charts using BI tools.

### GPS Data Visualization on Google Earth & Convex Optimization

Sept. 2018 to Oct. 2018

Skills used: Python, Numpy, Pandas, Scikit-learn, Matplotlib

- Used temporal sequential analysis to identify left-hand turns & stops signs.
- Identified the optimal path from a given set of routes.

### Generating Optimal Paths for Orienteering Events

Sept. 2018 to Oct. 2018

Skills used: Python

- Implemented an A\* search algorithm to find an optimal path for a given set of points in Mendon Ponds Park (Rochester, NY).
- Built a cost function by considering the elevation difference across different terrains.

### Data Analytics

Aug. 2018 to Dec. 2018

Skills used: Python, Numpy, Pandas, Scikit-learn, Matplotlib

- Implemented Otsu's method for 1D clustering of vehicle speeds.
- Built a 1D classifier to maximize public safety & maximize trust for a data of vehicle speeds.
- Wrote a decision tree classifier program which classifies among cupcakes & muffins using weighted GINI index with an accuracy of 96.72%.

### Exploratory Analysis of European Soccer

Mar. 2017 to May 2018

Skills used: R, Rattle, SQL, SQL Server Management System

- The soccer database in SQLite was migrated to R/Rattle and Microsoft SSMS to perform data cleaning, transformation, visualization, and to perform the predictive analysis resulting in predicting the player position based on his ratings.
- The insights obtained from the predictive analysis were used in selecting teams for the Fantasy Premier leagues of selected countries with an average accuracy of 80%.

### Implementations in Java

Sept. 2017 to Dec. 2017

Skills used: Java

- Implemented Unix *find* command using Java.
- Built a java program to simulate a game Vanishing of the Trolls based on multi-threading & thread synchronization in Java.
- Implemented a client-server approach for the Hangman game.

### Internet Of Things for Smart Cities

Jan. 2017 to Apr. 2017

Skills used: JavaScript, Node-Red, JSON, IBM Bluemix

- Developed a system which manipulates sensor data into visualized applications.
- I developed an application which provides smart solutions to management of waste, reduce traffic congestion & make accurate weather predictions.

## Awards

Rochester Institute of Technology · Graduate Scholarship  
Obtained a 20% Graduate Scholarship

May 2018

RNS Institute of Technology · Top 10 Project  
Top 10 among 40 groups in the Department Of Computer Science.

May 2017

Final undergraduate project based on 'Internet of Things for Smart Cities'.