Aditya Kalyan Jayanti

585-351-7855 • aj8582@rit.edu • aditya9517.github.io • linkedin.com/in/akj17 • github.com/Aditya9517

EDUCATION

Rochester Institute of Technology | Master of Science in Computer Science — Exp. May 2020

- Coursework: Computational Problem Solving, Introduction to Big Data, Algorithms, Big Data Analytics, Intelligent Systems, Intelligent Security Systems, Database System Implementation, Cryptography, Cognitive Computing.
- Advanced Certificate in Big Data Analytics.

RNS Institute of Technology | Bachelor of Engineering in Computer Science — July 2017

- Coursework: Data Structures, OOPs, Algorithms, Unix, OS, DBMS, Network Security, Software Architecture.

SKILLS

Languages: Python, Java, R.
Database: MySQL, CouchDB, PostgreSQL, InfluxDB, MongoDB
Web Technologies: HTML5, CSS, JavaScript, PHP, Mustache, jQuery.
Source Control: GitHub, Bitbucket.
Tools: JIRA, Wireshark, Node-Red, Docker, Grafana, Selenium.

EXPERIENCE

Alstom — May 2019 – Aug. 2019

Software Engineer Intern | Melbourne, FL

- Implemented IoT protocols such as *MQTT, SNMP* for the data management platform.
- Designed, developed, containerized and deployed applications using *Python*, *Docker* and *Jenkins*.
- Built unit tests using *PyTest*. Tracked, organized, prioritized bugs and improvements through *JIRA*.

RCare, Inc. — Jan. 2019 – May 2019

Software Engineer Intern | Rochester, NY

- Developed & fixed bugs for Advanced Nurse Call Systems, deployed across ~800 facilities in US & Canada.
- Implemented the user interface using *HTML5, JavaScript, PHP, Mustache* and *jQuery*.
- Created a feasibility study on the use of *Advanced-Locating Protocol* to place locators at senior care facilities.

PROJECTS

Independent study – Rochester Institute of Technology — Jan. 2020 – Current

Skills used: Python, NLTK, Gensim, SciPy, Matplotlib, MongoDB

- Analyzing social media to track progress for early diagnoses of a controversial disease.
- Implementing a Machine Learning system to detect depression among the LymeNet community.
- Developing an algorithm to test topic size of the LDA model using similarity metrics.

Forecasting and Analyzing Trends between Airlines and Crude Oil Prices — Jan. 2020 – Current

Skills used: Python, NLTK, Scikit-Learn, Toolkits-Matplotlib, Pandas, Keras, Prophet API

- Developing an early warning system for airlines with high operating costs using ML and NLP.
- Predicting the trend of crude oil prices using sentiment of news articles.
- Visualizing the impact on operating costs as a result of flight delays and high oil prices.

Natural Language Processing to Analyze Movie Reviews — Aug. 2019 – Nov. 2019

Skills used: Python, Scikit-Learn, Text Blob, NLTK, Selenium, BeautifulSoup

- Created a python script to automate collection of data through web scraping.
- Implemented sentiment analysis using Logistic Regression, SVM and Naïve Bayes.
- Developed TextRank, TF-IDF algorithms to generate concise summary of reviews.

Travel blog application built using CouchDB — Aug. 2018 – Nov. 2018

Skills used: CouchDB, HTML, CSS, JavaScript, RESTful API, Postman

- Developed a platform where information can be shared through CRUD operations.
- Implemented a token-based authentication feature for data integrity.
- Utilized mango queries to provide polling functionality.

GPS Data Visualization on Google Earth and Convex Optimization — Aug. 2018 – Oct. 2018

Skills used: Python, NumPy, Pandas, Matplotlib

- Utilized temporal sequential analysis to identify left-turns and stop signs.
- Developed a cost function to determine the most optimal path.

Exploratory Analysis of European Soccer — Mar. 2018 – Apr. 2018

Skills used: R, Rattle, SQL Server Management System

- Data cleaning, transformation and visualization was performed on the soccer database.
- Used predictive analysis to select teams and player positions for the Fantasy Premier League with an average accuracy of 80%.

Internet of Things for Smart Cities — Jan. 2017 – Apr. 2017

Skills used: JavaScript, Node-Red, IBM Bluemix

- Developed a system which manipulates sensor data into visualized applications,
- Provided smart solutions to reduce traffic congestion and make weather predictions.