# HARISH PUVVADA

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#### **EDUCATION**

New York University - Tandon School of Engineering, New York, NY Master of Science in Computer Engineering, GPA: 3,67/4

May 2018

Amrita University, Bangalore, India

May 2015

Bachelor of Technology in Computer Engineering, GPA: 3.7/4

### **RELEVANT COURSE WORK**

Design and Analysis of Algorithms, Foundations of Data Science, Machine Learning, Programming for Big Data Analytics, Risk Management

#### **SKILLS**

Programming Languages: Python, Java, C++, C

Web Development : HTML5, CSS3, JavaScript, AJAX, jQuery, PHP, JSON, D3.js

**Databases** : MySQL, PL/SQL

**Data Analytics**: Hadoop, MapReduce, Pig Latin, Spark SQL, Spark MLib, Tableau **Libraries**: Scikit-learn, Pandas, Numpy, Matplotlib, Scipy, SeaBorn, keras

Operating Systems : Linux, Mac OS, Windows

Tools and Technologies: GIT, SVN, PyCharm, Jupyter Notebook, Visual Studio, Wireshark, MATLAB, Qualtrics, Docker

### **WORK EXPERIENCE**

# NYU Computer Science and Engineering Department, Brooklyn, NY

September 2016 - Present

Teaching Assistant

Developing virtual labs on NYU Vital, grading exams and holding office hours for graduate level Computer Networks course.

### New York City Transit, New York, NY

May 2017 - August 2017

Software Engineering Intern

- Designed and implemented a search engine to speed up employee access to protocol manual for service strategies using JavaScript, AJAX and twitter typeahead.js library.
- Developed an application through which Automatic Announcement System for trains can be tested without human intervention.

# NYU Technology Management and Innovation Department, Brooklyn, NY

September 2016 - April 2017

Graduate Research Assistant

- Designed a Web application using Python, D3.js, PHP and MySQL for Human Computer Interaction research.
- Created surveys using Qualtrics and JavaScript, analyzed and visualized the survey data using Tableau.

### Tata Consultancy Services Ltd, Mumbai, India

June 2015 - July 2016

Developer, **Project**: Enterprise Resource Planning(ERP) - Finance and Accounting for more than 200 clients in India.

- Responsible for requirement gathering from clients and developing design solutions.
- Application development using Core Java, Servlets, JSP, JavaScript and AJAX.
- Resolved critical application issues and optimized MySQL stored procedures to reduce buffer time for On Demand Reports (ODRs).

### **ACADEMIC PROJECTS**

# Data Wrangling Yelp's JSON Data (Pig Latin, PySpark)

Imported Yelp business JSON data, cleaned and found out most common restaurant types for selected states/provinces.

### **Loan Default Prediction** (*Python, Pandas, Seaborn, plotly, Machine Learning*)

- Performed exploratory data analysis on Lending Club company's dataset to find patterns using Seaborn, plotly visualizations.
- Implemented Random Forests, Logistic Regression, MLP algorithms for predicting if a customer will default the loan or not with an accuracy of 84% and False Negatives of less than 1%.

### Bitcoin Price Prediction (Python, Java, Pandas, SparkML, SparkSQL, Big Data, Neural Networks)

- Predicted Bitcoin prices on hourly basis by identifying correlation between market sentiment and twitter sentiment.
- Used Spark SQL for data preprocessing and Spark MLib, Recurrent Neural Networks(LSTM) for time series forecasting.

# Twitter Bot or Not (Python, Pandas, Numpy, Seaborn, Machine Learning)

- Extracted tweets using Twitter Rest API and Classified twitter profiles as "Bots" or "Human" using Machine Learning algorithms based on the attributes like name, location, verified, etc. to achieve an accuracy of 91%.
- Implemented Grid Search, Bagging and Boosting techniques to increase accuracy by almost 2%.

# **ACHIEVEMENTS**

- Google developer challenge scholarship 2018 recipient.
- Awarded 5/5 rating for the best performance at Tata Consultancy Services training.
- Merit based scholarship of 8000\$ for masters at New York University.