# VINAYAK RAGHUPATHY

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# **EDUCATION**

New York University, Courant Institute of Mathematical Sciences, New York, NY

May 2017

Master of Science, Computer Science, GPA: 3.33/4.00

Coursework in Big Data, Fundamental Algorithms, Programming Languages

Operating System, Database System and Big Data Science.

#### Manipal Institute of Technology, Manipal, India

May 2012

Bachelor of Engineering, Computer Science and Engineering, GPA: 8.41/10.00

#### TECHNICAL SKILLS

- Database Management Systems (Db2,Oracle)
- Data Structure and Algorithm
- Shell Scripting
- C, C++, SQL, PL/SQL
- Operating Systems: Windows, Unix, Linux
- Tools: Putty, Data studio, Winscp382, SqlPlus, Sql\*Plus, I Sql Plus, NS2 Simulator

#### PROFESSIONAL EXPERIENCE

IBM India Pvt Ltd on Bharti AMS Project, Gurgaon, India

Oct 2012 - Dec 2014

Associate Systems Engineer

- Manhattan-Designed the template and implemented the ETL (Extraction/Transformation/Loading) process for component and packs, for which any prepaid customer could create and receive call, internet, and SMS benefits collectively
- Rule Engine- Implemented the back end database design and handled and streamlined the ETL process of data certifying the offer and promo benefits based on preset business rules
- SUK-Automated the file pulling, extraction and loading logic for of all the prepaid and postpaid consumer data including the activations of new customers and disconnection of existing customers; scheduled it on a daily basis
- Subscription Engine-Strengthened the back end churning process for the complete Airtel's customer prepaid and postpaid base in India and integrated it in the application

# ACADEMIC PROJECTS

# Enhancing Efficiency of Wireless Transmission Medium for Improvement of Quality of Service in Mobile Ad Hoc Networks (AWK, C++, OTCL, NS2 Simulator) Summer 2012

- Conducted a research analysis on the routing protocols AODV and AOMDV
- Utilized Quality of Service metrics to evaluate and analyze their performance for various simulations on NS2 Simulator
- Implemented a QOS metric Link Lifetime based on the guidelines of the IEEE paper

# Cluster Analysis on Yelp, Zomato, and Google Places Restaurant Data to Produce a Rating/Review on Google Maps API October 2015-December 2015

- Filtered and cleaned data input using Hive from Yelp, Zomato and Google places
- Computed analytics like best cuisine, top restaurants, best/worst neighborhoods with respect to restaurants and weighted average of the selected zip code/neighborhood calculated on the combined data using Mapper and Reducer and visualized using Google Maps API and Dynamic HTML

# **CERTIFICATIONS**

Rice University: An Introduction to Interactive Programming in Python (Part 1 & Part 2)

Big Data University: SQL Fundamentals I