# **RUCHIT MODI**

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# **EDUCATION**

Stony Brook University, Stony Brook, NY

Master of Science in Computer Science

Dec 2020 (Expected) GPA 3.92/4.00

• Relevant Courses: Data Science Fundamentals, Natural Language Processing, Artificial Intelligence

#### Veermata Jijabai Technological Institute (VJTI), Mumbai, India

May 2016

Bachelor of Technology in Information Technology

GPA 9.61/10.00

• Relevant Courses: Data Structures and Algorithms, Operating Systems, Data Mining, Network Security

### TECHNICAL

- Languages: Java, Python, MySQL, MS SQL, Hive, HBase, C/C++, HTML, CSS, JavaScript, PHP, JSP
- Tools: Git, Maven, Redis, Jenkins, RabbitMQ, Apache Flink, Apache Kafka, REST, Tensorflow, Docker
- Utilities: Intellij Idea, Jupyter, MacOS, Windows, Linux

### **EXPERIENCE**

# Media.Net Software Services Pvt. Ltd. (Directi), Mumbai, India

Jul 2016 - Aug 2019

Software Development Engineer 2 (Skills: Git, Mayen, Redis, Jupyter, RabbitMO, Flink)

- Designed and implemented an entire data flow architecture for automation of keyword launch pipeline for advertisement using RabbitMQ and Apache Flink; improved the efficiency of the pipeline by ~80%
- Devised an algorithm to show contextual ad keywords on a webpage using information from the content of its parent url webpage; contributed an additional ~50% revenue to the existing analyser
- Created a search engine api which returns Bing search results of a keyword from Microsoft Cognitive Services and computes its relevant phrases using TextRank: a modified PageRank algorithm
- Implemented Thompson sampling (Bandit algorithm) to explore similar intent keywords and exploit the best keyword earning higher revenue per impression

### Deloitte Consulting India Pvt. Ltd., Mumbai, India

May 2015 – Jul 2015

Business Technology Analyst Intern (Skills: Salesforce, Apex, Visualforce)

- Developed custom visualforce pages and controllers/extensions per client requirements in Salesforce.com
- Created Apex triggers to automate tasks on insertion/updation of records; optimized existing triggers to meet the Governor Execution Limits of Salesforce increasing efficiency by ~30%

#### **PROJECTS**

# Email Classification Using Supervised Learning Algorithms (Skills: NLTK, ML, NLP, Latex)

- Devised a text classification algorithm to help classify emails into custom user-defined labels; performed data preprocessing steps and implemented two supervised algorithms: k-NN and Naive Bayes Classifier
- Published a technical paper in "Advances in Intelligent Systems and Computing" series of Springer 2017

### **IEEE-CSI Fraud Detection** (Skills: Python, Jupyter, Pandas, Numpy, Scikit-learn, Data Science)

- Performed extensive data analysis of fraudulent card transactions; plotted distributions of numerical features and examined their correlations using data visualization tools
- Implemented feature engineering techniques on categorical data and developed models using Logistic Regression and XGBoost to predict if a future transaction is fraud

# Pacman and Tic Tac Toe (Skills: Python, Artificial Intelligence)

- Constructed admissible heuristic functions to implement efficient low cost search algorithms for pacman
- Created AI agent in tic tac toe using min-max algorithm and alpha-beta pruning to compete with humans

#### ADDITIONAL

- Award Recipient, JRD Tata Scholarship (2015 & 2016) for excellent academic performance
- Runner up, Technohunt (2015), a treasure hunt inspired coding competition in Technovanza, VJTI
- Runner up, Android Application Coding Challenge (2014), Credit Suisse Group
- Treasurer, Interact Club (2009-10), a Rotary sponsored club organizing community service initiatives