

# RUCHIT MODI

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## EDUCATION

**Stony Brook University**, Stony Brook, NY

**Dec 2020 (Expected)**

*Master of Science in Computer Science*

- 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, Falcon, 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, Maven, Redis, Jupyter, RabbitMQ, 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/updating 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 SVM 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