RUCHIT MODI

306 Sheep Pasture Rd, East Setauket, NY 11733
rjmodi@cs.stonybrook.edu | (631) 710-8679 | linkedin.com/in/rmodi6 | rmodi6.github.io

EDUCATION

Stony Brook University, Stony Brook, NY   **Aug 2019 - 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   **Jul 2012 – May 2016**
Bachelor of Technology in Information Technology   **CGPA 9.61/10.00**
- Relevant Courses: Data Structures & 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; created and optimized Apex triggers to automate tasks on insertion/updation of records 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