RAHUL SUBRAMANIAM

106 West 105th Street, New York, NY 10025
(646) 934-3281 | rs4128@columbia.edu | github.com/rs4128
https://www.linkedin.com/in/rahul-subramaniam/

EDUCATION

Columbia University   **New York, NY**
Master of Science in Data Science   **Expected May 2022**
- Coursework: Data Analysis and Visualization, Machine Learning, Database Management, Probability, Statistics, Language Processing, Algorithms, Stat Inference & Modelling, Applied Machine Learning, Cloud Computing and Big Data (pursuing).

RV College of Engineering   **Bangalore, India**
Bachelor of Engineering in Computer and Information Sciences   **Jul 2020**
- Coursework: Linear Algebra, Object Oriented Programming, Data Structures.

TECHNICAL SKILLS

Programming	Python, R, SQL, C, C++.
Data Science	A/B Testing, Numpy, Sklearn, NLTK, Keras, Spacy, Scipy, Statsmodels, Tslearn.
Cloud Services	AWS, Google Cloud Platform.
Databases	Firebase, Relational DB, MongoDB, Neo4J,DynamoDB.
Data Visualization	Matplotlib, GGplot, Power BI,d3.
Development	Git, Javascript (React JS,NodeJS), Typescript (Angular), Java (Android Studio),Flask.

WORK EXPERIENCE

Ralph Lauren   **New York, NY**
Part Time Data Science Consultant   **Sep 2021 - Feb 2022**
- Liaised with members of RL's Business team to perform Market Basket Analysis and presented findings to the VP of Analytics.
- Developed a model for 4 use cases that help understand factors causing changes in purchase behavior in test and control stores.
- Performed ETL operations to analyse 12.5 GB Data and provided association rules & recommendations for future use cases.

Orenda Inc.   **New York, NY**
Data Science Intern   **Jun 2021 - Sep 2021**
- Worked with three members of the Data Science team to develop Deep Learning models to predict Real Time Prices in ERCOT.
- Merged and Scraped time series data from 2016 onwards and performed time series analysis and feature engineering.
- Achieved an accuracy of approx 90 percent in Q2-Q3 by building a Stacked LSTM Categorical model predicting price peaks.

MakeMytrip (Ecommerce Division)   **Bangalore, India**
Software Engineer   **Jul 2020 - Dec 2020**
- Worked as a full stack developer in the Ad-tech team to develop a react frontend and java backend to onboard external hotels.
- Collaborated with individuals handling Marketing, to see Ad-tech generate an average revenue of $125,965 per month.

CME Group   **Bangalore, India**
Software Intern   **Jan 2020 - Jun 2020**
- Analyzed Environment data and developed CMED Portal assisting the Distributed Systems Team in Environment Status Tracking.
- Automated processes of fetching data and alerting the team when error % exceeded 0.20 reducing manual effort by 80% (approx).

MakeMyTrip (Ecommerce Division)   **Bangalore, India**
Data Science Intern   **Jun 2019 - Jul 2019**
- Award winning team member of 'Trip Ideas: Outstanding project of Q3' for working on MMT's Travel Inspiration project.
- Leveraged NLP and AWS to build a Recommendation system that crawled relevant text and images for 50 destinations from 4 different travel websites, used Google Vision and Textrank algorithms for tag generation and recommended tourist destinations.

PROJECTS

Image Captioning with Conditioned LSTM Generators   **May 2021 - Jun 2021**
- Trained a Bidirectional LSTM model on a dataset with 6000 training images-captions pairs and 1000 testing image-caption pairs.
- Adopted Beam Search and Greedy decoding techniques that ensured grammatical correctness of 95% of the captions.

Lexical substitution with Word2Vec embeddings and BERT   **May 2021 - Jun 2021**
- Found Lexical substitutes by implementing Lesk Algorithm using Wordnet and BERT using Huggingface transformers.
- Suggested a heuristic that involved use of synonyms that improved the performance of the BERT Transformer by 2%.

Exploratory Analysis and Visualization of Advanced NBA Stats   **Mar 2021 - Apr 2021**
- Developed a Bookdown project (using R) that studied factors affecting player performances, injuries and positions.
- Analyzed a comprehensive dataset with base statistics going back to 1980 and Advanced Statistics from 1990 onwards.

Machine Learning based Prediction of Earthquake Impact   **Jan 2019 - May 2019**
- Predicted the impact of an earthquake and analysed for the best material to be used for buildings to mitigate its impact.
- Adopted a novel parameter known as 'Damage Grade' to determine the extent of earthquake impact.