ADITYA GARG

adityagargg@gmail.com | [LinkedIn](#)

EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Science   New York, NY
Master of Science in Data Science, 3.94   Dec 2017
- Courses: Algorithms, Statistics and Probability Theory, Statistical Inferential Modeling, Machine Learning, Computer Systems, Natural Language Processing, Neural Networks and Deep Learning

Indian Institute of Technology Roorkee   Roorkee, India
Bachelor of Technology   May 2014
- Courses: Computer Systems and Programming, Data Structure, Linear Algebra, Calculus, Geoinformatics

EXPERIENCE

Tesla   Palo Alto, CA
Senior Data Scientist, Charging Data and Modeling   Mar 2018 - Present
- Technical lead for network planning and modeling part of the team with 3 data scientists, and interns
- Developed a demand forecasting and capacity planning framework for supercharger network - leveraging time-series modeling, supervised regression, and unsupervised clustering models. Used on a continuous basis for allocating ~$1billion budget.
- Developed a generalized spatial optimization model for recommending charging infrastructure locations globally
- Built a network and traffic simulation model to study impact of vehicle design and charging infrastructure changes on travel patterns and customer experience
- Causal analysis using bayesian structural time series model for measuring and modeling the impact of new infrastructure on existing network and customer charging behavior
- Led end to end implementation of products -collaborating with cross functional teams - from firmware implementation to automated data ingestion to data modeling to automated deployment
- Developed dockerized APIs for geospatial mapping and planning tools used by several hundred site developers and executives

United Nations DPKO   New York, NY
Data Science Intern   Oct 2017 - Dec 2017
- Integrated, visualized, and analyzed geospatial and unstructured text data to generate actionable insights on conflicts and fatalities for Department of Peacekeeping Operations.

IBM Research   Yorktown, NY
Data Science Intern (IBM Social Good Fellow)   May 2017- Aug 2017
- Used natural language processing and machine learning to extract semantic, lexical and personality features from raw text, perform topic modeling, detect biases, and develop an automated grader and classifier.

NASA Goddard Institute for Space Studies   New York, NY
Research Assistant   Sep 2016 - Dec 2016
- Developed statistical methods to determine global trends and predictability of forest fire activity based on climatic conditions using satellite and climate data.

Flipkart Internet Private Limited   Bangalore, India
Data Scientist, Demand Modeling and Shaping   Jun 2014 - Jun 2016
- Identified key pricing factors to develop demand forecasting models and a price indexing mechanism
- Developed product clustering models to evaluate cross-product price elasticity and internal cannibalization

PROJECTS

Image-to-Image Translation using Cycle-Consistent Adversarial Networks   *Sept 2022*
- Used a U-NET architecture based CycleGAN to generate art by style transfer between images of different artists

Improved Training of WGANs, Columbia University   *Nov 2017-Dec 2017*
- Implemented a modified loss function for training Wasserstein Generative Adversarial Networks (WGANs) and studied its performance on MNIST datasets under different architectures for the generator and discriminator.

Interactions Between Gene Methylation and Age, BMI and Smoking, Unilever   *Sep 2017- Dec 2017*
- Modeling and identifying interactions between hypo- and hyper-methylated genes and the biological aging process via age, BMI and relations to smoking using skin methylation DNA datasets.

SKILLS

- Python, Spark, SQL, HTML, CSS
- TensorFlow, Docker, Airflow, Tableau