

# Abhishek Patria

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## SUMMARY

MS Analytics candidate with 4 years of experience across Data Science, Simulation & Strategy – have worked as a team leader as well as an individual contributor. Actively seeking Data Science positions to drive business & product impact.

## EDUCATION

### Georgia Institute of Technology

Atlanta, GA

*Master of Science in Analytics - Computational Data Analytics - GPA: 3.9/4.0*

Aug 2019 – Dec 2020

**Coursework:** Machine Learning, Deep Learning, Natural Language Processing, Design of Experiments, Regression Analysis, Optimization, Analytical Modeling, Data and Visual Analytics, Understanding Markets with Data Science, Financial Optimization

**Graduate Teaching Assistant:** Introduction to Business for Analytics

### Birla Institute of Technology and Science

Pilani, India

*Bachelor of Engineering in Chemical Engineering - GPA: 8.37/10.00*

Aug 2011 – Jul 2015

**Coursework:** Numerical Methods, Linear Algebra, Differential Equations, Probability, Statistics, Product & Brand Management

## SKILLS

**Programming:** Python, R, JavaScript, Xpress, VBA | **Database:** SQL (MySQL, SQLite) | **Cloud:** AWS, Azure

**Modeling:** Deep Learning, Regression, SVM, Decision Trees, KNN, ARIMA, Linear Programming, A/B Testing

**Frameworks:** Pytorch, Numpy, Pandas, Scikit-learn, Spark, Hadoop Map Reduce | **Visualization:** Tableau, Gephi, D3

## EXPERIENCE

### Anheuser-Busch InBev

Mountain View, California

*Technical Product Manager Intern*

Jun 2020 - Present

- Working to define, build and test an MVP for revolutionizing trade marketing execution through CV, ML & analytics

### Oil & Natural Gas Corporation (India's largest National Oil Company & a Fortune 500 firm)

Ahmedabad, India

*Data Scientist: Data Analytics Group*

Apr 2017 - Aug 2019

- Built & led a team by persuading senior directors to pioneer the practice of analytics in the firm & developed its growth plan
- Built a prescriptive model for hydrofracturing design & drilling optimization using Kriging, Clustering, Ensemble & Neural Nets techniques. The model resulted in oil reserve accretion worth \$25MM and serves as a template for brownfield projects
- Developed first in-house ML model with a predictive power of 90% for determination of Minimum Miscibility Pressure
- Engaged & supervised industry leaders for PoC projects to establish the value proposition of analytics for the firm

*Strategy Executive: Oilfield Development Group & Thermal Lab*

Nov 2015 - Mar 2017

- Prepared Field Development Plan for reviving a major mature oil field through focus on new technology induction
- Designed an algorithm for generating temperature profile of an oil reservoir to optimize oil production
- Provided technical and data-driven consultancy to international clients for Thermal Enhanced Oil Recovery methods

### J. P. Morgan Chase

Mumbai, India

*Investment Banking Analyst*

Jul 2014 - Dec 2014

- Developed a reconciliation system for EMEA [Europe, Middle East, & Africa] region trades ranging from \$100k to \$1MM
- Established procedures to standardize trade reporting for multiple asset classes in compliance with European Securities & Markets Authority thereby minimizing trade breaks & saving 15 man-hours/week by automating the data processing pipeline

## PROJECTS

### Detecting Fake Yelp Reviews and Answering User Questions

Georgia Tech

- Built a classifier with an accuracy of 88% to detect fake reviews on Yelp by using models like CNN, Gradient Boosting & BERT
- Developed a question answering framework for user queries by training BERT model on SQuAD and classified genuine reviews

### Identifying Duplicate Quora Questions

Georgia Tech

- Explored Siamese, Attention Based LSTMs and BERT architecture to identify Quora questions with similar meaning or intent
- Built an ensemble model by using XGBoost & Adaboost on tested architectures resulting in accuracy of 91% & F1 score of 0.88

### Scalable Neighbor-based Online Textbook Recommendation Application - (SNOTRA)

Georgia Tech

- Built a hybrid personalized book recommendation system using content based & collaborative filtering with an accuracy of 86%
- Predicted coldstart ratings & recommendations using KNN weighted by Cosine Similarity computed using TFIDF transform
- Developed web application using Flask & D3 to display forced layout graph between similar users & books

### Facebook Comments Prediction

Georgia Tech

- Explored linear & ensemble models to predict the number of comments an FB post would get within certain time after posting
- Compared Lasso, Stepwise & PCA Poisson, and Random Forests Regression models using multiple performance metrics

### Amul Dairy (Cooperative brand jointly owned by 3.6 MM milk producers) - Pro Bono

Anand, India

- Used Critical Path Method in milk powder packaging unit to shorten the slack & ensure completion of activity within stipulated working hours, without incurring overtime

## LEADERSHIP, AWARDS, & TALKS

**Guest Lecture & Workshop:** Conducted guest lectures & workshops on statistical modeling & ML for applied Data Science in engineering sector for IEEE Chapter - PDP University, Gandhinagar with over 100+ students and faculty as participants

**Ranking:** Secured All India Rank of 171 (99th percentile) in Graduate Aptitude Test in Engineering (GATE)

**Mentoring:** Mentored undergraduate students for reservoir simulation projects through 8 week long STEM internship program