

ADVAIT RAMESH IYER

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EDUCATION

Master of Science, Business Analytics
Syracuse University, New York

Aug 2018 - May 2020

GPA: 3.6

Bachelor of Technology, Mechanical Engineering
Maulana Azad National Institute of Technology, Bhopal

Jul 2013 - Apr 2017

GPA: 3.5

SKILLS

Programming: Python (NumPy, Pandas, Scikit-learn, Matplotlib, Scipy, NetworkX), R (dplyr, ggplot2, caret), PySpark

Data Management/Processing: SQL, MySQL Server, MS Access, MongoDB, Apache Spark, Hadoop, MapReduce

Statistics: Linear Regression, Resampling, Regularization, Classification, Unsupervised Learning, Hypothesis Testing

BI/Analytics Tools: MS Excel, Macros, Tableau, Power BI, MicroStrategy, Alteryx, SAS, SPSS, Google Analytics

Operations Research: Linear Programming, Integer Programming, Transportation, Sensitivity Analysis, Scheduling

EXPERIENCE

Data Science Consultant, Whitman School of Management, Syracuse University

Jan 2020 - May 2020

- Improved alumni engagement strategy of the school by performing analysis of 8,000+ alums network
- Supervised data collection by leading a team of 3 analysts in gathering new data points via LinkedIn Sales Navigator
- Performed ETL using MS SQL to build the database, and reduced 80% dimensions through eigenvalue decomposition
- Identified 5 highly active communities, and calculated centrality and influence metrics for all alums in the network

Graduate Research Assistant, Whitman School of Management, Syracuse University

Sep 2019 - Present

- Working research paper: Dynamic newsvendor model for optimistic and pessimistic policy-based profit forecasting
- Built inventory management system for a perishable product under Poisson and Weibull distributions of demand
- Represented demand-order relationship as a stochastic discrete-time Markov Chain model with 50+ transition states
- Simulated Monte Carlo episodes of demand for optimistic, pessimistic and risk-neutral managers in batches of 10,000
- Predicted profit for all optimal policies using a deep neural network, and achieved root mean squared error of \$1 - \$5

Associate Analyst, SG Analytics Private Limited

May 2017 - Jun 2018

- Liaised with C-level clients and MR team to gather requirements, test feasibility and scope the research hypothesis
- Trained 200+ employees on using invoice and delivery module on SAP HANA, spearheading digital transformation
- Led a 4 analyst team in building go-to-market for an automobile company, conserving CAPEX worth \$1.5 million

PROJECTS

Georgia PPE Inventory Management System

- Designed RDMS for transactions between manufacturers, hospitals, doctors, and warehouses using MySQL Server
- Implemented stored procedures for daily reporting of 100+ KPIs which improved the operational efficiency by 40%
- Recommended EOQ model to minimize holding, order, and shortage costs for each equipment warehouse by 60%

GIS-based Delay Prediction Tool

- Performed spatial-temporal analysis of 2 million cab rides in NYC by joining weather, and accidents' data using SQL
- Optimized performance of the Linear model through VIF, ANOVA, and regularization enhancing R-squared by 40%
- Computed the lag between actual and ideal speeds, and stratified sampled all the trips discretized into 3 lag levels
- Benchmarked performances of SVM, and tree-based methods, and Random Forest provided the best accuracy of 72%

Delivery and Quality Assurance Volunteer, Statistics without Borders

- Monitored data collection and statistical analysis methodology for an NPO to help rural communities in Central America
- Reviewed the survey design and sampling plan, and suggested changes in both baseline and end-line surveys

Network Analysis of Amazon's Products

- Identified highly-connected communities among 3 million+ products, educational content being the most popular
- Trained random-forest and multi-layer perceptron and achieved 63% accuracy in predicting popularity rating (1-5)

Employee Retention Strategy through Socio-Economic Analysis

- Associated higher salary to gender, marital, and citizenship status and visualized the spread of distributions in RStudio
- Benchmarked the AUC-ROC curves of ML algorithms, achieving 85.6% accuracy with generalized Logistic regression

Smartwatch preference study at Syracuse University

- Studied brand loyalty and consumer preference metrics through Qualtrics-powered survey of 211 students
- Identified 5 preference-based clusters and correctly targeted 63% of students in marketing the predicted product line
- Verified the outcomes through A/B testing of 2 control groups, and identified sales strategy improve by 30%

Improving Airlines customer experience strategy

- Devised an agile methodology to deliver an MVP of predictive analytics pipeline to boost customer satisfaction
- Identified key customer pain-points, and performed regularized linear regression achieving R-square of 0.74