Atisha Rajpurohit

🏠 Washington D.C. | 🔗 LinkedIn | 📞 (571) 351-3630 | ✉ ar1710@georgetown.edu | 🐙 GitHub

EDUCATION

Georgetown University   **Aug 2021-May 2023**
MSc. in Data Science and Analytics, GPA: 3.97
Relevant Coursework: Probability Modelling and Statistical Computing, Natural Language Processing, Advanced Data Visualization, Data Structures and Algorithms in Python, Big Data and Cloud Computing, Machine Learning App Deployment

Mount Carmel College, Bangalore University   **May 2014-Apr 2017**
BSc. in Economics, Mathematics and Statistics, GPA: 3.89
Relevant Coursework: Financial and Public Economics, Econometrics, Applied Statistics, Statistical Inference, Sampling Theory, Industrial Statistics, Operations Research, Differential and Integral Calculus, Linear Algebra

WORK EXPERIENCE

Ernst and Young's Quantitative Economics and Statistics (QUEST), Washington D.C.   **Jun 2022-Current**
Statistical Staff Analyst
- Designed and chose statistically valid and representative samples for clients for the purposes of establishing tax credits/deductions
- Computed tax credits/deduction estimates for clients using complex statistical extrapolation methods
- Wrote statistical sampling and estimation methodology reports for clients to cover the scope of the entire project for process documentation and future possible audit defense
- Conducted SAS Introductory training for fellow colleagues to aid in the understanding of the sampling and estimation process along with advanced code writing in SAS

Mercer, Marsh & McLennan Group, Mumbai   **Oct 2019-Mar 2021**
Assistant Manager, Wealth Analytical Services (WAS)
- Calibrated Mercer's tracking software, 'Pfaroe', amended the assumptions and cash flow setup to increase efficiency over 100% by reducing the standard hours from 3 to 2 hours for most clients
- Hosted training of core actuarial concepts, BAU processes for new recruits by creating training videos, providing dummy processes, and building an interactive feedback session
- Award- December 2019 by the head of WAS, for exceeding the productivity target of 100% by 12%

Jardine Lloyd Thompson (now Mercer), Mumbai   **Mar 2018-Sep 2019**
Actuarial Analyst
- Executed triennial valuations, annual updates for DB Pension Schemes, UK (Trustee Solutions) and annual accounting disclosures for UK (Corporate Solutions) on accounting standards: FRS17, FRS102, IAS19, ASC715
- Strategized workflow management which required allocating work to members of the team subject to each one's capacity to meet the target of 95% Service Level Agreement
- Award- 'Spotlight', December 2018 for delivering highest client utilization metric of 85% in the team

PROJECT EXPERIENCE

Simplifying Autism Spectrum Disorder Screening
- Determined the top 3 characteristics relevant to adequately establish ASD traits in toddlers, children, and adults
- Developed models with these characteristics using Logistic Regression and Random Forest to achieve 92% accuracy

Data Visualization to help Retail Investors
- Created visual tools to aid a user with sectoral and individual technical analysis, to illustrate the growth of 100$ invested for 7 years
- Constructed a narrative with interactive visuals to elucidate fundamental analysis for stock selection based on 5 prime fundamentals

News Classification as per Political leaning
- Executed NLP pipelines in Python such as POS tagging, Dependency Parsing and Named Entity Recognition to distinguish articles as conservative, liberal or neutral
- Classified into the three political leaning categories with 80% accuracy using Multinomial Naïve Bayes, Logistic Regression and BERT

ACTUARIAL CERTIFICATIONS

Society of Actuaries, SOA

ExamP – Probability: A/B Testing, ANOVA, Parametric & Non-Parametric tests
ExamFM – Financial Mathematics: Interest Rate Models, Equations of Value, Annuities
ExamSRM – Statistical for Risk Modelling: Time Series, Generalized Linear Models (GLM), Decision Theory, Bayesian Statistics
ExamIFM – Financial Engineering: Efficient Market Hypothesis, Portfolio Theory, Stochastic Calculus, Black-Scholes Model, Options & Greeks
ExamLTAM – Long-Term Actuarial Mathematics: Contingencies: Annuity Contracts, Profit Testing, Mortality & Standardization
Exam STAM – Short-Term Actuarial Mathematics: Markov Chains, Survival Models, Graduation & Statistical Tests
VEEMATHSTATS – Mathematical Statistics
VEEACCTFIN – Accounting and Finance: Financial Institutions, Derivatives, Accounts, Capital Project Appraisal
VEEECON – Economics: International Trade, Balance of Payments, Money & Interest Rates, Macroeconomics

SKILLS & INTERESTS

Technical: SAS | Python (NumPy, Pandas, Matplotlib, Seaborn,Sklearn, Wordcloud) | R (Stringr, Tidyverse, Arules, Visnetwork, Rpart, ggplot2) | SPSS | HTML | CSS | SQL | Tableau | Minitab | Excel | **Dev**: GitHub, Jupyter Notebook, VS Code| **AWS Cloud** : EC2, SageMaker, EMR, Hadoop, Dask, Spark
Language: English, Hindi, French, Marathi
Interests: Multi-media sketching & painting, Mimicry, Personal Finance