

AANCHAL DUSIJA

akd73@georgetown.edu | +1 (202) 330 6510 | <https://www.linkedin.com/in/aanchal-dusija>

PROFESSIONAL EXPERIENCE

- GLOBALFOUNDRIES, NEW YORK, USA** **June 2023 – August 2023**
Digital Strategic Planning Intern – Business Strategy
 - Incorporated Anaplan software to streamline and automate financial planning processes, resulting in a 30% reduction in time spent on budgeting and forecasting tasks.
 - Achieved a 15% reduction in scheduling conflicts by creating automated reminders and notifications within the Anaplan calendar, enhancing team productivity and reducing missed deadlines.
 - Conducted data analysis to identify key areas for business process improvement, leading to a 15% reduction in operational costs.
- NATIONAL STOCK EXCHANGE OF INDIA LTD, MUMBAI, INDIA** **February 2021 – February 2022**
Research Associate - Economic Policy and Research
 - Collaborated with senior management to establish the NSE Data Room, enabling seamless access to market microstructure data in a cloud computing environment, decreasing data retrieval time by 30%.
 - Conducted comprehensive analyses on the Impact Costs of over 1300 stocks listed under NSE from 2013 to 2021 in the NSE Data Room, providing valuable insights into market trends and investment opportunities.
 - Executed the NSE-NYU Conference on Indian Financial Markets 2021, bringing together leading academics and finance industry professionals, resulting in a 20% increase in attendance compared to previous years.
- NATIONAL STOCK EXCHANGE OF INDIA LTD, MUMBAI, INDIA** **January 2020 - March 2020**
Intern - Economic Policy and Research
 - Developed a comprehensive statistical analysis deploying Variance Ratios to assess the efficiency of market hypothesis for NIFTY100 stocks, resulting in identifying 20% of stocks that displayed significant deviations from the efficient market.
 - Authored monthly articles for NSE's Market Pulse magazine, providing expert analysis on emerging economic policies and the potential impact on financial markets, reaching an audience of over 10,000 readers.

EDUCATION

- GEORGETOWN UNIVERSITY, GRADUATE SCHOOL OF ARTS AND SCIENCES, WASHINGTON DC, USA** **August 2022 - May 2024**
Master's Degree in Data Science and Analytics
CGPA: 4/4
 - Received a Merit-Based Scholarship for the Program.
- MEGHNAD DESAI ACADEMY OF ECONOMICS, MUMBAI, INDIA** **August 2019 - August 2020**
Post-Graduation Diploma in Economics with Specialisation in Finance
CGPA: 3.39/4
 - Ranked overall 1st position in Corporate Finance and Risk in Equity & Fixed Income among 40 students.
 - Received the Best Dissertation Award of the Year in 'Detection of COVID-19 Using Chest X-ray Images'.
- NARSEE MONJEE INSTITUTE OF MANAGEMENT STUDIES, MUMBAI, INDIA** **June 2016 - August 2019**
Bachelor's Degree in Applied Statistics & Analytics
CGPA: 3.35/4

ACADEMIC PROJECTS AND PAPERS

- MACHINE LEARNING: DETECTION OF COVID-19 USING CHEST X-RAY IMAGES:**
Developed and trained a simplified Convolutional Network model using 412 Chest X-ray images, achieving an accuracy rate of 92% in correctly identifying COVID-19 cases.
- FINANCIAL RISK: CREDIT SPREADS IN THE NBFC SECTOR OF INDIA:**
Derived the Credit spreads of 3 companies leveraging Black Scholes and Merton Model where the average yield on the LIC bond is 7.17%, followed by SREI (10.08%) and Ujjivan (11.36%), and compared the Indian Bond Market to other Asian Countries.
- DATA SCIENCE: PREDICTIVE MODELING OF FLIGHT:**
Implemented advanced statistical techniques: Stepwise and Logistic Regression, Decision Trees, Bagging, and Random Forest to analyze 5 million observations in a study on US domestic flight delays and identify the key causes of delays, attaining 94% accuracy.
- QUALITY MANAGEMENT: SIX SIGMA IN DENTISTRY:**
Implemented the DMAIC process to assess the quality performance by performing ANOVA and t-testing to check the quality performance from the viewpoint of the clinic against the customer's expectations, leading to an increase in revenue by 15%.
- STOCHASTIC PROCESSES: QUEUING THEORY IN PORT HANDLING SYSTEM:**
Implemented Kendall's Notation of Queuing Theory to analyze daily data for 6 weeks and optimize waiting and service time at JNPT Terminals, resulting in a 10% decrease in average loading and unloading time per ship.
- LINEAR ALGEBRA: MARKOV CHAINS IN GENERAL ELECTIONS:**
Assessed the voting patterns of 1,500 voters in the general elections of Maharashtra to identify key factors influencing party preferences using Eigenvalues and Eigenvectors, resulting in a comprehensive understanding of voter behavior.

TECHNICAL SKILLS

Programming: R, Python, C, AWK | **Database & Big Data:** SQL, MongoDB, Hadoop, Spark | **Visualization & Analysis:** Tableau, Power BI, D3, SPSS, Stata, SAS VA | **Web Development:** HTML, CSS | **Cloud Platforms:** Amazon Web Services, Microsoft Azure | **Statistical Tools:** Probabilistic Modeling, Time Series Analysis, Machine Learning

RESEARCH ASSISTANCE

- CENTRE FOR SECURITY AND EMERGING TECHNOLOGY (CSET)** **January 2023 – Present**
Informed reporting requirements for AI by characterizing the AI use cases of US government agencies. Analysed data that can be inferred from reporting of AI in the federal government and make recommendations to improve reporting for AI systems.