Joel Mande

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Professional Summary

Dynamic Actuarial Science graduate with a strong foundation in statistical modeling, risk assessment, and data-driven decision-making. Proficient in predictive analytics, financial modeling, survival analysis, and machine learning, with a proven ability to optimize financial risk management and unlock actionable business insights. Adept at leveraging advanced methodologies such as time series forecasting and stochastic modeling to solve complex actuarial challenges and drive innovation in financial strategies.

Experience

Data Analyst Aug 2024 – Present

Center for Data Science and Artificial Intelligence (DSAIL), DeKUT *Kenya*

- Spearheading statistical modeling and time-series analysis initiatives using Python and R to forecast coffee yields, enabling data-driven decisions in agricultural planning.
- Designed and implemented predictive models that increased forecasting accuracy by 30%, directly contributing to optimized resource allocation in coffee farming.
- Collaborating with multidisciplinary teams to integrate machine learning models into existing agricultural systems, enhancing decision-making efficiency.
- Developing comprehensive reports and visualizations to communicate actionable insights, influencing stakeholders' strategic direction.
- Exploring environmental and economic factors affecting yield fluctuations to devise scalable and sustainable solutions for coffee production.

Education

Dedan Kimathi University of Technology Nyeri, Kenya

B.Sc., Statistics & Actuarial Science *Oct 2021 – Aug 2024*

Technical Skills

Programming & Analytics: Python (NumPy, Pandas, Scikit-learn), R (ggplot2, dplyr), SQL
Actuarial Tools & Techniques: SAS, Prophet, VBA, Actuarial Models
Data Visualization: Power BI, Tableau, Matplotlib, Seaborn
Machine Learning & AI: Predictive Modeling, Regression, Classification, Clustering, Neural Networks
Financial Mathematics & Quantitative Modeling: Present Value Analysis, Loss Modeling, Investment Forecasting
Statistical Methods: Hypothesis Testing, Monte Carlo Simulation, Multivariate Analysis, Time Series Forecasting

Activities

- **Lead Data Science & Actuarial Modeling Mentor**: Guided over 50 students and professionals in advanced topics including time series analysis, actuarial pricing, and risk modeling. Recognized for providing high-impact feedback and fostering a collaborative learning environment.
- **Creator & Contributor, GitHub Portfolio**: Developed and shared 10+ actuarial and data science projects, including risk models, credit scoring algorithms, and health cost prediction tools. Gained recognition within the actuarial community for its comprehensive, real-world applications.
- **Collaborator, Actuarial Analytics Community**: Partnered with industry professionals to enhance data-driven solutions in actuarial pricing, portfolio optimization, and risk management. Actively contributed to discussions and collaborative projects focused on improving actuarial modeling techniques.