# Xiaoyang (Eva) Shen

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## **EDUCATION**

## Cornell University, College of Engineering / Ithaca, New York

Bachelor of Science in Operations Research and Information Engineering, minor in Computer Science / August 2020 - May 2024

Master of Engineering in Data Science / Expected: May 2025

Cumulative GPA: 3.5 / Cornell Dean's Honor List

Relevant Courses: Optimization, Probability and Statistics, Stochastic Processes, Financial Engineering, Object-Oriented Programming, Data Structures and Functional Programming, Machine Learning and Data Science

#### **WORK EXPERIENCE**

## Quantitative Analyst / Bank of America / June 2024 - August 2024

- Developed and refined predictive models for pricing swaps and swaptions, ensuring alignment with market trends and accuracy in comparison with trading desk outputs.
- Automated the submission and calibration processes for the inflation bilateral curve using Python, achieving successful pass rates in all company risk assessments.
- Conducted comprehensive analysis of accreting cancellable swaps data, identifying market trends and dynamics to provide actionable insights to the team.

## Teaching Assistant / Cornell University College of Engineering / August 2023 - May 2024

- Facilitated weekly discussions to review course material and reinforce learning through exercises.
- Conducted regular Office Hours sessions to provide assistance to students

#### Data Analyst and IT Audit / Cornell University - Office of Compliance and Risk / May 2023 - August 2023

- Leveraged data analysis techniques to conduct sample testing and assigned maturity ratings based on NIST guidelines, enhancing accuracy and efficiency in IT audit processes.
- Proficiently identified risks, policies, and compensating controls within IT systems, and provided actionable recommendations to mitigate vulnerabilities and strengthen security posture.

## Junior Data Analyst / JANA Corporation / May 2022 - August 2022

- Utilized SQL and Excel to fine-tune and optimize the leak data model.
- Refined key parameters such as beta, eta, and gamma within the predictive equation for each specific reason, significantly improved the model's accuracy and effectiveness in forecasting and preventing future leaks.

## PROJECTS & RESEARCH

#### Research Assistant / Johnson Controls / January 2023 - July 2023

- Employed data analysis techniques and machine learning algorithms in Python to accurately evaluate the health status of industrial chillers, enabling proactive maintenance and reducing downtime.
- Implemented data visualization tools to communicate complex findings and insights derived from the model to non-technical stakeholders, facilitating data-driven decision-making within the organization.

### Flight Delays Data Analysis Project / Python, SQL, Tableau

- Conducted data analysis project focused on investigating critical aspects of airline delays, utilizing historical flight data to extract valuable insights and enhance the understanding of delay patterns.
- Leveraged a combination of Python, SQL, and Tableau to conduct in-depth data exploration. Generated robust Ordinary Least Squares (OLS) regression models and data visualizations to uncover and visualize complex relationships within the dataset.
- Employed statistical techniques, including Logistic Regression and the Holt Winter Forecasting method, to develop predictive models for future airline delays.

#### TECHNICAL QUALIFICATIONS

Languages: Python, SQL, Java, Javascript, OCaml, Audit Command Language (ACL), Matlab

Tools: Github, Tableau, Microsoft Office, Excel, Powerpoint