
COMPUTER SCIENCE MSC CANDIDATE AT THE UNIVERSITY OF OXFORD

- Computer Science MSc Candidate at the University of Oxford with a focus on Artificial Intelligence and Machine Learning. Previously interned on data science teams at IBM's Chief Analytics Office and Amtrak.
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EDUCATION**University of Oxford, Oxford, England**

2024 – Exp. 2025

- Master of Science in Advanced Computer Science

Princeton University, Princeton, New Jersey

2020 – 2024

- **GPA:** 3.75 (Cum Laude, Sigma Xi Honor Society)
 - **Major:** Bachelor of Science in Engineering, Operations Research and Financial Engineering
 - **Minors:** Statistics and Machine Learning, Computer Science
 - **Relevant Coursework:** Reinforcement Learning, Optimal Learning, Optimization, Regression, Machine Learning with Social Data, Ethics of Computing, Modern Data Science Methods, Programming Systems, Algorithms & Data Structures
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SKILLS

- Python | NumPy | pandas | scikit-learn | PyTorch | Java | R | Excel | Matplotlib
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EXPERIENCE**IBM Chief Analytics Office, New York, New York | Strategy Consultant Intern**

Summer 2023

- Designed and implemented a data-driven monitoring system in Python to optimize IBM's software pricing machine learning model, driving increased revenue generation within a hundred-million-dollar revenue stream.
- Engineered a proactive mechanism to evaluate performance against KPIs, pinpointing areas for price optimization.
- Collaborated with stakeholders to identify critical factors and metrics, incorporating multi-dimensional capabilities.

Amtrak, Washington, District of Columbia | Data Analyst Intern

Summer 2022

- Developed efficient data pipelines using pandas and NumPy to automate fuel usage data cleaning, processing, and analysis from a new database, significantly improving data quality and insights incorporated in marketing materials.
- Spearheaded a team in diagnosing and solving delayed train track assignments at Washington's Union Station using Lean methodologies. Conducted site visits and interviews, ran root cause analysis, and presented actionable solutions to executive leadership.
- Developed an Excel-based Agile labor forecasting system for Amtrak's Digital Technology department, improving forecast accuracy and providing data visualizations for financial trend analysis.
- Conducted a literature review on mathematical optimization modeling approaches for the railroad maintenance scheduling problem, recommending the use of time-space networks.

Global Research and Consulting, Princeton University | Consultant

2020 – 2021

- Redesigned the social media presence of MIYA company, a local Princeton small business.
 - Analyzed client data and created diversity and impact metrics for On Purpose, a business mentoring business professionals on social and environmental impact.
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PROJECTS**Senior Thesis: A Multi-Objective Optimization Approach to Equitable Urban Cycling Network Growth** 2023 – 2024

- Theorized a novel Mixed-Integer Quadratic Programming mathematical optimization model to equitably expand bike lane networks, mitigating the effects of socioeconomic inequality.
- Implemented a Python program to identify optimal equity-focused bike lane infrastructure projects for city planners.

Brown Food Cooperative Food Order Predictor Model

2023 – 2024

- Developed a time series machine learning model that forecasts future food orders to reduce human error, streamline order processing, and minimize food waste.
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VOLUNTEERING**Trenton Arts at Princeton | Private Trumpet Teacher**

2022 – 2024

- Provided private trumpet lessons to a local high school student, enhancing their fundamentals and musicality.
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ACTIVITIES**Brown Food Cooperative, Princeton University | Treasurer**

2023 – 2024

- Orchestrated budget planning and purchase authorization with a budget of over \$30,000, effectively safeguarding the Cooperative's financial well-being.

Princeton University Orchestra | Trumpet Player

2021 – 2023