

Xinyu(Xiyah) Chang

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EDUCATION

Johns Hopkins University

Master of Science in Engineering, Data Science GPA: 4.00/4.00 (Estimated)

Baltimore, MD

August 2023 - May 2025 (Expected)

University of Washington

Bachelor of Art in Economics, Mathematics, minor in Data Science GPA: 3.60/4.00

Seattle, WA

August 2019 - June 2023

Coursework: Machine Learning, Data Visualization, Data Analysis, Data Algorithm, Database Systems, Artificial Intelligence

Honors: Department Scholarship, Annual Dean's List, Education Data Prediction Model Competition 2nd Place

WORK EXPERIENCE

Intellipact LLC

Data Analyst Intern

Dallas, TX

August 2023 - October 2023

- Mitigated project delays and ensured data uniqueness by rectifying overlooked duplicate entries using elimination commands.
- Discovered open rate improvement prospects through A/B testing, with anticipated 10% increase via subject line verbiage changes and 5% boost through email sending window optimization.

RESEARCH EXPERIENCE

Deep Neural Networks for Estimation and Inference

Research Assistant, Mentor: Professor Jing, Tao

University of Washington

July 2022 - September 2022

- Tackled challenge of deriving parameters for generating treatment variables while replicated code using PyTorch.
- Reduced bias by 88% with greater number of weights on Neural Network layers while scaling data volume from 10k to 100k.

PROJECTS

Model Selection for Online Course Participation

Group Lead

March 2022 – June 2022

- Streamlined data cleansing for 10k education dataset by feature selection and missing value handling, leading test accuracy increased from 0.8 to 0.98 for all Neural Networks, Random Forest, and K-Nearest Neighbors models.

Vaccine Scheduler Database

Member

October 2021 - December 2021

- Designed and implemented a Python-based appointment system, streamlining vaccine appointment data management for both patients and doctors through a relational database hosted on Azure.
- Performed SQL operations to add, search, modify, and delete patient appointment information, troubleshooting the integration of the database with the user interface through collaborative discussions with Teaching Assistants (TAs).

Hedge Analysis under Different Volatility Regimes

Analyst

June 2021 - August 2021

- Utilized moving average analysis to confirm stock market's consistent growth, revealing that 70% of time index prices remained above their moving average, providing valuable insights into market trends for informed decision-making.
- Applied correlation and beta analysis, complemented by visualizations, to demonstrate that VIX serves as a superior hedge for US stocks across various volatility scenarios compared to Gold.

LEADERSHIP AND VOLUNTEERS

Hainan Yuanheng Xinshi International Trade Co.

Manager Assistant

Harbin, China

June 2023 - August 2023

- Manifested quick learning and organization skills by assisting manager in establishing various global businesses' frameworks.

Xiaomi

Campus Ambassador

North America Region

March 2021 - December 2021

- Demonstrated leadership and proactive problem-solving mindset by successfully overseeing 30 chapters and organizing annual recruitments, engaging audience of over 2200, all accomplished despite a lack of prior experience or knowledge in the field.

SKILLS

Programming Language, Statistical Tools, Visualization Tools

- Python, R, SQLite, MySQL
- Numpy, PyTorch, Pandas, Sklearn
- Microsoft Word, Excel, Powerpoint
- LaTeX, Git
- Regression Model
- ANOVA
- Two Sample T-test, F-test
- Regression Diagnostics
- Python Matplotlib
- R ggplot, plotly
- Tableau
- PowerBI