

# Xinyu(Xiyah) Chang

Baltimore, MD • xchang23@jh.edu • (470) 601-1532

## 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 2<sup>nd</sup> 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.

### Elevator Optimization

Corresponding Author

University of Washington

June 2022 - December 2022

- Designed optimal elevator policies by constructing basic "Dumbwaiter" models using Spatial Process and Gibbs Random Field.

## 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).

## 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