

Joshua Chen

(203) 308-1138 | [Email](#) | [LinkedIn](#) | [Portfolio](#) | [Github](#)

SUMMARY

M.S. in Data Science with a year of experience and three years in mathematics education and leadership. Passionate about using Python, SQL, and Machine Learning to build high-impact data products and uncover actionable insights.

WORK EXPERIENCE

Data Science Intern

April 2024 – Aug. 2024

World Bank (DIME)

Washington D.C. (Remote)

- Supported the development of an R package designed for researchers to query Facebook Marketplace data.
- Produced studies and a blog post demonstrating how private data supplements insufficient public data in research.
- Studied the urban/rural divide in Nigeria, creating detailed vignettes and interactive visualizations.

Lead Calculus Teacher/Grade Team Lead

Aug. 2020 – July 2023

Uncommon Schools

Brooklyn, NY

- Achieved the second-highest network exam scores and led the 11th grade to the highest GPA and attendance school-wide.
- Strategically applied detailed data analysis to identify performance gaps and drive targeted remedial teaching for growth.
- Led biweekly evaluation and planning meetings for a team of 12, preparing PowerPoints and guiding discussions.
- Taught 90 students daily across four classes in two subjects, while also coaching chess and Boys' volleyball.

Fundraising Analyst Intern

May 2019 – Aug. 2019

Boston College Alumni Center

Boston, MA

- Conducted data-driven analysis to enhance alumni engagement strategies and optimize fundraising efforts.
- Analyzed over 2,000 alumni records with Excel to identify key areas for outreach, presenting insights to stakeholders.
- Collaborated on benchmarking and restructured event registration, contributing to improved alumni experience.

SKILLS

Languages & Tools: Python, R, SQL, JavaScript, HTML/CSS, Docker, MySQL, PostgreSQL, Azure, AWS, Bash

Libraries & Frameworks: PyTorch, TensorFlow, XGBoost, LangChain, Numpy, Pandas, FastAPI, MLFlow, Git

Machine Learning: NLP, Computer Vision, Time-Series Analysis, Classification, Regression, Generative AI

Other Tools: Tableau, Streamlit, Plotly, Seaborn, ggplot2, Folium, Excel, PowerPoint

PROJECTS

AI + Climate NYC Hackathon - Resilience App

[GitHub Repo](#) — [Live Demo](#)

- An app to help policymakers and green developers identify sustainable opportunities for community development.
- Utilizes NYC Open Data, LangChain, and Generative AI, with a live Folium interface for decision-making.

LeetCode Daily Problem Automated Dashboard

[GitHub Repo](#) — [Live Demo](#)

- Provides immediate analysis with predictive benchmarks to inform and motivate LeetCode performance and progress.
- Utilizes AWS RDS and web scraping, integrated predictive benchmarks, and implemented Plotly visualizations.

NLP Song Lyric Classification Web Application

[GitHub Repo](#) — [Live Demo](#)

- Full-stack web app that predicts music genres from lyrics, trained on 50,000 songs. The app is live on my portfolio.
- Fine-tuned BERT using PyTorch and deployed with Docker, FastAPI, and Azure. Frontend built with JavaScript.

EDUCATION

Universitat Pompeu Fabra

Barcelona, Spain

Master of Science in Data Science

Aug. 2023 – July 2024

Coursework: Machine Learning, Deep Learning, Statistical Inference, Advanced NLP, Reinforcement Learning, Optimization, Machine Learning for Finance, Causal Inference

Relay School of Education

New York, New York

Master of Arts in Secondary Mathematics Education

Aug. 2020 – May 2022

Boston College

Newton, MA

Bachelors in Mathematics, Minor in Economics

Aug. 2016 – May 2020

Coursework: Econometrics (Doctorate Level), Mathematical Modeling, Statistics