

Jefferson Xu

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EXPERIENCE

Amazon, NY

Jun 2022 - Sep 2022

Software Developer Engineer Intern (P13N, Product Graph)

- Researched and clearly defined signals for model drift by running K-S statistic tests using Pandas, NumPy, and SQL
- Designed model drift detection workflow using AWS Step Functions, EMR Clusters, and Spark jobs
- Wrote Spark jobs in Python that processed petabytes of product catalog data that fetched model and statistical metrics
- Persisted drift signal metrics as JSON in S3 to be read from dashboard alerting when model retraining is needed

Amazon, WA

Jun 2021 - Sep 2021

Software Developer Engineer Intern (Amazon Web Services, Kumo)

- Designed and created internal REST API service that connected all AWS support feedback data using AWS API Gateway, DynamoDB, and Lambda
- Improved support ticket search rankings by adding metrics to existing API workflow using React.js and Java
- Wrote extensive integration and unit tests using Enzyme and JUnit test libraries reaching > 95% code coverage

Bizi, IL

Nov 2020 - May 2021

Software Developer

- Worked with team of five to develop web app displaying 50+ local businesses for socially conscious consumers
- Led front-end team converting Figma mockups to components using React.js, AWS Amplify, DynamoDB, and S3

System Software & Security Lab at Rutgers University, NJ

Apr 2020 - Aug 2020

Undergraduate Research Assistant

- Researched the usage of the Vapnik–Chervonenkis (VC) dimension as a proper metric for testing Neural Networks
- Generated polynomial regression tests using PyTorch and NumPy finding new correlation between model accuracy and its VC bound

BlackLapel, NY

Jun 2018 - May 2019

Web Development Intern

- Streamlined unit and integration tests using Selenium WebDriver and Node.js to allow for testing automation
- Refactored existing API endpoints using PHP, Neo4j, and Docker containers to be RESTful microservices

EDUCATION

Northwestern University

GPA: 3.7/4.0

Bachelor of Arts in Computer Science and Minor in Economics

Expected Jun 2023

- **Relevant Courses:** Data Structures & Algorithms, Intro to Computer Systems, Intro to Networking, Software Construction, Human Computer Interface, Intro to AI, Linear Algebra, Multivariable Integral Calculus, and Discrete Math
- **Awards:** Capital One Software Engineering Summit Participant (1/60 chosen from 500 applicants), Semifinalists for VentureCat (Northwestern's annual startup competition)

Bergen County Academies

GPA: 3.9/4.0

Academy for Technology and Computer Science

Sep 2015 - Jun 2019

PROJECTS

Biological Network Visualization - Icahn School of Medicine at Mount Sinai NYC

- Developed tools for mentors Dr. Selim Kalayci and Dr. Zeynep Gümüş to better analyze biomolecular data
- Changed network structure to graph to improve efficiency and runtime when searching for unique node

SeniorMania - <https://github.com/jeffersonxu/SeniorMania2.0>

- Built web application solo from start to finish using React.js and Firebase to store and display each user's data
- 16 teams registered with over 150 students participating, highest number of students in school history

SKILLS

Languages - Java | Python | Javascript | HTML | CSS

Technologies - Git | React.js | AWS | mySQL