Jefferson Xu

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EXPERIENCE

Amazon Jun 2021 - Sep 2021

Software Developer Engineer Intern: AWS Kumo

- Designed and created internal API tool aimed at unifying all AWS support feedback data, reducing query time and resources needed for Kumo engineers
- Built API service with REST endpoints ground up 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 Nov 2020 - May 2021

Software Developer

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

System Software & Security Lab at Rutgers University

Apr 2020 - Aug 2020

Undergraduate Research Assistant

- Researched the usage of the Vapnik–Chervonenkis (VC) dimension as a proper metric for testing Neural Networks
- Conceptualized, trained, and tested my own experiments and models with PyTorch using the CIFAR10 dataset
- Generated polynomial regression tests on data collected with NumPy, uncovering a new correlation between a model's accuracy and its VC bound

BlackLapel Jun 2018 - May 2019

Web Development Intern

- Implemented a universal content management system and an XML sitemap generator to improve company's SEO
- Streamlined unit and integration tests using Selenium WebDriver and Node.js to allow for testing automation
- Refactored API endpoints in PHP and wrote Neo4j queries to be compatible with REST API
- Developed microservices using Docker containers and reconfigured live site to be ADA compliant with Ember.js

EDUCATION

Northwestern University GPA: 3.9/4.0

Bachelor of Arts in Computer Science and Minor in Economics

Expected Jun 2023

- Relevant Courses: Data Structures & Algorithms, Intro to Computer Systems, Intro to 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)

PROJECTS

TriviaSearcher - https://github.com/jeffersonxu/trivia_searcher

- Created web application that filters trivia questions from the jService API as well as a Jeopardy board simulation **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
 - Utilized the Three.js library to add more 3D features and the ability to toggle visibility
 - 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 is 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 | Firebase | mySQL | jQuery