Emily Zhao

Incoming SWE Intern @ Linkedin

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Education

University of Maryland - College Park, MD - *Bachelors of Science in Computer Science*   May 2025
    - Sprintern at Break Through Tech DC
New York University - New York, NY - *Bachelors of Arts in Computer Science*   August 2021 - May 2022
    - Underclassmen Liaison at NYU Stern International Business Association

Work Experience

Software Engineer Intern - *Raytheon Technologies*   *May 2023 - August 2023*
- Upgraded and improved a legacy codebase for a web app used by **hundreds** of employees at Raytheon.
- Migrated code from ASP.NET MVC to ASP.NET Core utilizing upgrade assistant.
- Created user/role management system through using Entity Framework Core and Identity Framework.
- Revamped UI on frontend using **CSS, HTML, C#, JavaScript** and libraries like **Kendo UI.**
- Tested functionality of software and UI with automated and unit testing using **Selenium**.
- Worked with a team utilizing an **agile workflow** and weekly sprints to meet project goals.
- Implemented new features such as session timeout notification, user role management, sorted draft history saving **hundreds** of hours of manual work for the logistics team.
- Deployed scalable software that went live to **hundreds** of end users.

Software Engineer Intern - *Walker & Dunlop*   *January 2023*
- Worked on frontend development of dashboard that displays rent data trends depending on zip code input.
- Developed UI components on front-end such as zip code search bars and containers using **HTML, CSS, TypeScript** and **JavaScript.**
- Utilized **npm** and **Node.js** for frontend development in **Vue**.

Projects

Spam Email Classifier
- Developed a python script utilizing Natural Language Processing to classify an email as spam or non spam.
- Preprocessed data with libraries such as **NLTK** to tokenize, lemmatize, and remove stopwords on each training message.
- Used **scikit-learn, NumPy,** and **pandas** for creating dataframes, arrays, data scaling and modeling.
- Created the final machine learning model (which yielded **96%** accuracy on testing dataset) with Random Forest Classification, and integrated the model into a flask backend.
- Utilized React for frontend to create interactive interface for users to input email messages.
- Implemented Flask API allowing React frontend to make calls to API endpoints and use the machine learning model.

Twitter App
- Created an application using **Kotlin** in Android Studio that mimics the original Twitter/X application.
- Created login page that allows users to login to any existing Twitter account using **OAuth login**
- Developed user friendly UI and replicative functionalities that allow users to scroll through live feed and post.
- Utilized an open source library Android Async HTTP for asynchronous network requests with the **Twitter REST API**
- Implemented twitter feed image loading and caching with open source library Glide

Skills

Frameworks / Libraries: ASP.NET Core, React, Flask, Vue, Selenium, Entity Framework Core, JUnit, Kendo UI, scikit-learn, NumPy, pandas, NLTK, Node.js, AWS
Skills: Natural Language Processing, Machine learning, Full Stack Web Development, Linux, Unix, Git, Android App Development
Relevant Coursework: Data Structures, Algorithms, Object Oriented Programming, Discrete Math, Probability & Statistics, Calculus 1 & 2, Computer Systems, Linear Algebra
Languages: Python, Java, C, C#, Kotlin, HTML, JavaScript, CSS, Bash, R, TypeScript, SQL, MIPS Assembly