

# ERIC XIAO

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## ACADEMICS

**Bachelor's in Computer Science, University of Washington-Seattle (June 2025)**

**Cumulative GPA: 3.88**

**Relevant coursework:** Data Structures and Algorithms, Software Design and Implementation, Systems Programming, Databases, Machine Learning, Natural Language Processing, Computer Graphics, Distributed Systems, Computer Vision, Deep Learning

**Awards:** Deans List (all quarters), 2023 Husky Seed Fund, 2025 Husky 100

## EXPERIENCE

### Amazon

*Software Development Engineer*

**July 2025 - Present**

*Seattle, United States*

- Architected and executed **critical AWS infrastructure migration** of Lambda and Step Function code affecting 4+ cross-functional Amazon departments, delivering 17,000+ lines of code across 10 code reviews in a month while **maintaining 99.9% uptime**.
- Built an AI-powered documentation automation tool using **multi-agent architecture** that reduced self-review preparation time **from 1-2 days to minutes**, saving effort for senior engineers across several internal teams.
- Led a Java modernization initiative for **15+ interconnected service packages** by resolving circular dependencies and upgrading to JDK17 and AWS SDK v2, unblocking dependent teams' upgrade paths and ensuring organizational compliance.
- Leading efforts to streamline OS deployment processes across **50+ device-type pipelines** and reduce manual maintenance time.

### Eat Together

*Co-founder and Director*

**Feb 2022 - June 2025**

*Seattle, United States*

- Spearheaded a **cross-functional team of 10+** software developers, product designers, and business developers in developing a **React Native and Firebase mobile app** that helps students organize and attend food-related meetups.
- Overlooked the whole process, from ideation and prototyping to development and deployment, helping gain **500+ users and 200+ meetups** since public launch in September 2023.
- Pitched Eat Together at the Dempsey Startup Competition, where we placed in the **top 36 teams (out of 83)**.
- Achieved **over \$1500 in funding** via sources like the 2023 Husky Seed Fund award.

### Amazon

*Software Development Engineer Intern*

**June 2024 - Sep 2024**

*Seattle, United States*

- Spearheaded project to deprecate a redundant service in Amazon's Just Walk Out technology, streamlining device provisioning architecture for **50+ cashierless stores** and resulting in **\$200+ monthly infrastructure cost savings**.
- Enhanced data fetching API and migrated **200,000+ entries of DynamoDB data** to consolidate device intrinsic information, reducing security review efforts by **11 weeks annually**.
- Modified APIs across **10 dependent services** to ensure a seamless transition, utilizing Java, Python, and CoffeeScript.

## PROJECTS

### AirFlip - JavaScript, Python, React, Tensorflow, Web Speech API

*A web platform that helps users seamlessly swipe through PDF documents using gesture detection and speech recognition; won a Finalist (top 17 projects) Award at Hack the North 2021.*

- Developed a **React** user interface that includes a PDF viewer and webcam video footage, and utilized the **Web Speech API** to flip the document after speaking key words.
- Linked the frontend with a **Tensorflow MoveNet** machine learning model that detects head gestures to flip the PDF.

### Leveraging Political Bias for Stance Detection - Python, PyTorch, HuggingFace, Matplotlib, Google Colab

*A research project for UW's Natural Language Processing (CSE 447) class: detecting political biases in language models pre-trained on different corpuses of biased news articles.*

- Created a script utilizing **PyTorch and HuggingFace** to fine-tune three variations of the DistilRoBERTa LM—a baseline, left-leaning, and right-leaning model—on our self-collected dataset of **700 news articles**.
- Analyzed these models' performances on detecting the political stances of news articles and plotted them on **Matplotlib**, concluding that LMs take on the political biases of their pre-training data.

## TECHNICAL SKILLS

**Programming Languages:** Python, Java, JavaScript, HTML, CSS, SQL, LaTeX, C#, C++, C, TypeScript

**Frameworks:** React, React Native, Next.js, Flask, Node.js, PyTorch, jQuery, BeautifulSoup, Sklearn, HuggingFace, Pandas, Matplotlib

**Technologies:** Firebase, Google Cloud, AWS, NoSQL, Google Colab, Figma