ERIC XIAO

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ACADEMICS

Bachelor's in Computer Science, University of Washington-Seattle **Expected Graduation: June 2025**
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
Cumulative GPA: 3.88

EXPERIENCE

Amazon — June 2024 - Sep 2024
Software Development Engineer Intern — *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.

Eat Together — Feb 2022 - Present
Co-founder and Director — *Seattle, United States*

- Spearheading 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.
- Overlooking 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 — June 2023 - Sep 2023
Software Development Engineer Intern — *Seattle, United States*

- Led the development of a data pipeline that generates daily Amazon One customer reports for **10+ business clients** and is **200% more efficient** than the current process.
- Utilized **AWS Lambdas and Kinesis Firehose** to process and transfer HTTP request data to a WorkDocs site while following industry-standard software development guidelines.
- Completed all project milestones **a week before the end date**, and delivered a project presentation to **over 40 Amazon One stakeholders**.

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.
- Wrote a paper detailing our methodology and findings: https://tinyurl.com/cse447paper

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