Aibo Feng

(512) 584-7310 | aibo.feng1@gmail.com | in/aibo | USA Citizen

Education

University of Washington Seattle, WA

B.S. in Computer Science *Expected Dec 2025*

- **Relevant Coursework**: Data Structures and Parallelism, Algorithms, Discrete Math, Linear Algebra, Probability Statistics, Computer Architecture, Systems Programming, Computer Security, Software Design and Implementation, Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Databases, Operating Systems, Distributed Systems

Work Experience

Software Engineer Intern June 2025 – Sept 2025

Oracle, Cloud Success Navigator *Redwood Shores, CA*

- Delivered 4 features—tabs in feature guidance drawer, new metadata for Oracle Guided Learning integration, dropdown menu for sunburst widget, and user tagging for comments—using Preact/TypeScript, FastAPI, and GraphQL.
- Extended FastAPI/GraphQL BFF endpoints to support new UI workflows; tested data flows locally via SQL Developer.
- Authored unit tests with pytest (backend) and Jest (frontend), boosting coverage and catching regressions.
- Fixed 3 additional cross-stack bugs and performance issues, improving quality and consistency of user experience.

Software Development Engineer Intern June 2024 – Sept 2024

Amazon Web Services (AWS), Marketplace SaaS *Austin, TX*

- Designed & implemented an automated large-scale data validation workflow for 20,000+ AWS Marketplace SaaS products using Java, TypeScript, and AWS (Lambda, Step Functions, S3, and CloudWatch).
- Developed a proactive issue resolution system that automatically identified and cut tickets for detected issues across all SaaS products, eliminating up to 100% of high-severity customer-reported incidents and reducing resolution times by over 60%.
- Coordinated with cross-functional stakeholders to align auditing processes with team and business workflows.
- Deployed & maintained IaC via AWS CDK and CloudFormation for high serviceability and availability for future use cases.

Software Engineer Intern June 2023 – Sept 2023

ACES Academic Enrichment Center *Austin, TX*

- Developed an automated content extraction and retrieval pipeline (converting raw scanned documents to question + answer database) for the SAT exam tutoring team, streamlining the processing of a large volume of scanned exam papers.
- Implemented exam preprocessing system (contour detection, thresholding, text recognition) via OpenCV and EasyOCR.
- Designed a MongoDB database and a REST API for efficient storage and retrieval of extracted content.
- Collaborated with tutoring team and incorporated feedback to refine extraction accuracy and usability, resulted in 98% accuracy rate in extracting questions and answer choices from raw exam scans, reduced total text extraction time by 72%.

Research

Undergraduate Researcher Jan 2024 – June 2024

University of Washington *Seattle, WA*

- Conducted research on temporal dynamics of scientific information propagation on Wikipedia, applying NLP and data mining to build a pipeline for extracting and analyzing knowledge dissemination.
- Leveraged BeautifulSoup and NLTK to mine and preprocess data from Wikipedia and PubMed (∼100k articles total).
- Integrated NLP models such as GPT and BERT to deconstruct wiki edits into discrete facts and capture semantic changes.
- Experimented with BM-25, Contriver, TF-IDF, and Dense Passage Retrieval to build Wikipedia to ground-truth mappings.
- Presented preliminary findings in the 2024 Allen School Undergraduate and Master's Research Showcase.

Projects and Leadership

Sharded, Paxos-Replicated Distributed Key-Value Store | *Java* Dec 2024

- Designed and implemented a sharded, Paxos-replicated distributed key-value store with dynamic shard assignments, fault tolerance, load balancing, and transactional consistency using Paxos consensus and two-phase commit.

Imitation Learning for Quadruped Locomotion | *Python, Numpy, PyTorch* Mar 2024

- Conducted research on neural network architectures (FCN, RNN, LSTM) for behavior cloning in quadruped robots to improve locomotion performance and gait accuracy.

DEV[0] at UW | *Flutter, React, NodeJS* Nov 2022

- Co-founded DEV[0], a registered student organization at the University of Washington that empowers over 100 students through hands-on workshops in web and mobile app development.

Technical Skills

Languages: Java, Python, Assembly, C/C++, SQL, NoSQL, JavaScript/TypeScript, HTML/CSS
Frameworks: React, NodeJS, Express, FastAPI, GraphQL, Flutter
Tools: Git, LaTeX, Linux, Unix, Java (Maven, Gradle), REST APIs, SQL Developer, Docker, Azure, AWS (CloudFormation, CDK, Step Functions, Lambda, CloudWatch, EventBridge, S3, IAM), Jupyter Notebook
Libraries: pandas, NumPy, OpenCV, PyTorch, pytesseract, SQLite, Selenium, Beautiful Soup, JUnit