Aibo Feng

(512) 584-7310 | aibo.feng
1@gmail.com | \mbox{tm} in/aibo | USA Citizen

EDUCATION

University of Washington

Seattle, WA

B.S. in Computer Science

Expected June 2026

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

Work Experience

Software Development Engineer Intern

June 2024 - Sept 2024

Austin. TX

Amazon Web Services (AWS), Marketplace SaaS

- Automated a large-scale data validation workflow for 20,000+ AWS Marketplace SaaS products using 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, enabling smooth integration of pipelines into operational workflows.
- Designed, deployed, and maintained infrastructure as code (IaC) with AWS CDK and CloudFormation to ensure high serviceability and availability for future auditing use cases.

Software Engineer Intern

June 2023 - Sept 2023

ACES Academic Enrichment Center

Austin, TX

- Developed automated content extraction and retrieval system for a large volume of scanned exam papers.
- Implemented image processing techniques such as contour detection, thresholding, and text recognition using OpenCV and EasyOCR to preprocess exam papers.
- Designed a MongoDB database and a REST API for efficient storage and retrieval of extracted content.
- Collaborated with educational stakeholders for feedback, translating needs into technical features, boosting user satisfaction and system functionality.
- Achieved a 98% accuracy rate in extracting questions and answer choices from scanned SAT exam papers, reducing manual
 content extraction time by 72%.

RESEARCH

Undergraduate Researcher

Jan 2024 – Present

University of Washington

Seattle, WA

- Conducting research on the temporal dynamics of scientific information propagation on Wikipedia, applying NLP and data mining to analyze knowledge dissemination.
- Developed a lightweight Python-based pipeline to mine and preprocess Wikipedia edit histories, leveraging BeautifulSoup and NLTK to extract large-scale temporal datasets.
- Integrated NLP models such as GPT and BERT to deconstruct edit histories into discrete facts and capture semantic changes for accurate content analysis.
- Experimented with BM-25, Contriver, TF-IDF, and Dense Passage Retrieval to build mapping between Wikipedia content and ground-truth publications.
- $\bullet \ \ \text{Presented preliminary findings in the 2024 Allen School Undergraduate and Master's Research Showcase.}$

PROJECTS AND LEADERSHIP

Imitation Learning for Quadruped Locomotion | Python, 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.

Inkflux | JavaScript, Express, NodeJS, SQLite

May 2023

• Developed a full-stack mock storefront web application featuring user authentication, user profiles, product browsing, inventory management, and order processing.

DEV[0] RSO | 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 (Maven, Gradle), Python, Assembly, C/C++, SQL, NoSQL, JavaScript/TypeScript, HTML/CSS

Frameworks: React, NodeJS, Express, Flutter

Tools: Git, LATEX, Linux, Unix, REST APIs, 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