Eujean Lee

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EDUCATION

University of Washington, Seattle - B.S in Computer Engineering

Expected Dec 2024

- **GPA**: 3.83/4.00 | **Dean's List** for 9 quarters
- Related Coursework: Data Structures & Parallelism, Algorithms, Distributed Systems, Operating Systems, Artificial Intelligence, Computer Vision, Computer Security, Data Management, Database Internals, Digital Circuits & Systems

Experience

Teaching Assistant - UW Paul G. Allen School of CSE

Mar 2024 - Present

- Taught digital circuit design, FPGA, and SystemVerilog concepts during weekly quiz sections, and collaborated with the professor and co-TAs to develop weekly section materials, which were adopted for future course iterations
- Provided debugging support during regular office hours, conducted in-person lab demos, and answered conceptual questions
 on the online discussion board for 50 students

Research Assistant - UW Makeability Lab

Jun 2023 - Present

- Enhanced the visual saliency of sports equipment for low vision players with AR glasses and real-time computer vision, achieving an 85% object detection rate by developing a Python model for automated dataset sampling
- Achieved high performance in segmenting objects, resulting in a 91.8% segmentation mean average precision, by extracting frames with YOLOv8 and labeling 5,000+ frames using Roboflow
- Co-authored a demo paper published at the 2023 ACM Symposium on UIST

Software Engineering Intern - Soma Reality

Jun 2024 - Sep 2024

- Developed a cross-platform mobile social media app from initial **Figma** designs into functional features using **JavaScript**, **React Native**, and **Xcode**, ensuring smooth performance on both Android and iOS
- Integrated Firebase as the backend using JavaScript, restructuring user and conversation fields to manage data in a real-time cloud-based database, reducing data retrieval time by 25%
- Built a pipeline for frontend-backend communication, integrating real-time data from Firebase into the UI to display
 dynamic content such as updated conversations instantly
- Developed a component-based architecture using **React Native**, enabling reusable UI components and enhancing the frontend with functional features such as tab navigation and smooth screen transitions

Software Engineering Intern - Rasplayer

Jul 2019 - Aug 2019

- Developed and enhanced the company's website aesthetics using HTML, CSS, and JavaScript, achieving a 20% increase in mobile traffic and a corresponding 15% boost in overall website engagement
- Pioneered the development of a tribute page and survey forms, showcasing adeptness in frontend design and driving 500+ weekly visitors and outstanding 90% participation rate

PROJECTS

CineMate | Python, AWS(Lambda, Lex), React.js

 $\mathrm{Sep}\ 2024$

- Developed an **AWS Lex bot** for natural language understanding that enables users to search for movies by title and apply filters based on the release year
- Implemented slot elicitation, dialog management, and AWS Lambda for back-end logic, including API integration for fetching movie data from external sources using Python
- Created a frontend for the bot using React.js, integrating the Lex bot with a user-friendly interface

Mixed Up Power Ups | Haxe, Flixel

Mar 2024

• Developed a dynamic platformer game using **Haxe** and **Flixel**, achieving approximately **250** plays, demonstrating user engagement, and incorporated **15+** user feedback to improve mechanics, level design, and user interface

Dotorii: Scan Your Plan | Python, Swift, OCR

Oct 2023

- Implemented an iOS application to enhance accessibility, allowing users to capture posters or scan QR codes to integrate information into Google Calendar
- Used Swift and Python for API connections, integrating GPT and Google Cloud API to create a responsive interface that securely stores data

Flight Booking Application | Java, SQL, Microsoft Azure

Mar 2023

- $\bullet \ \ {\it Created a \ {\bf Java} \ application \ for \ account \ creation, \ flight \ booking/cancellation, \ and \ secure \ transactions \ via \ command-line}$
- Implemented SQL transactions and utilized Microsoft Azure SQL Server for efficient querying of flight and customer databases, ensuring simultaneous use by multiple customers without encountering conflicts

SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, TypeScript, HTML, CSS, SystemVerilog

Tools: React.js, React Native, Node.js, Git, Linux, AWS, Microsoft Azure, Firebase, Xcode, JUnit, NumPy, PyTorch, Spark

Spoken Languages: English, Mandarin Chinese, Korean