

Minjoon Eom

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Education

University of Washington

Bachelor of Science in Computer Science (GPA: 3.7 / 4.0)

Expected June 2027

Seattle, WA

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, SQL, C, C++

Spatial & AI/ML: VisionOS (Vision Pro), CoreML, PyTorch, MuJoCo, OpenCV, Nvidia Sortformer, RAG

Web & Cloud: React, Next.js, Node.js, Express.js, FastAPI, REST APIs, GraphQL, Docker, AWS (EC2, S3, Lambda, RDS)

Developer Tools: Git, GitHub Actions (CI/CD), PostgreSQL, MongoDB, WebSockets, JDBC

Experience

University of Washington

Software Engineer

Jun 2025 – Present

Seattle, WA

- Designed and deployed a **Python + SQL dashboard** to centralize UW ticketing workflows, improving operational efficiency and reducing manual request handling across the IT team.
- Built **backend data pipelines and optimized SQL queries** to aggregate, clean, and visualize request data, enabling staff to track status and prioritize issues more effectively.

UW Reality Lab (Capstone)

AR Software Engineer

Jan 2026 – Mar 2026

Seattle, WA

- Co-developed **Blubble**, an **Apple Vision Pro** assistant for neurodivergent users, integrating **AVAAudioEngine** and **Nvidia Sortformer** for real-time speech diarization.
- Engineered a multimodal tone analysis engine using **CoreML (DistilBERT)** to identify emotional intent and sarcasm with **80% accuracy** in user testing.
- Implemented an intelligent context engine using **GPT-4o-mini** and **RAG** to dynamically render Wikipedia-backed visual aids within the spatial environment.

Personal Robotics Lab

Software Engineer

Dec 2024 – Jun 2025

Seattle, WA

- Engineered a **real-time teleoperation pipeline** using **Python, Docker, and MuJoCo**, enabling live visualization of hand-pose data from **Apple Vision Pro** for precise robotic control.
- Applied **CNN-based pose estimation models** across 100+ simulated trials, improving alignment accuracy by **88.6%** and reducing motion jitter by **30%**.
- Presented research at the **UW Allen School Research Showcase** to 300+ faculty and industry attendees, highlighting AI-driven motion analysis for immersive teleoperation.

Projects

Call Captioner – Hiya Innovation Event | Python, FastAPI, WebSockets, React, Tailwind

- Architected a **full-stack infrastructure** using **FastAPI and WebSockets** to handle bidirectional real-time audio streams, reducing transcription-to-display delay by **35%**.
- Deployed a **low-latency NLP inference pipeline** to process live captions, enhancing accessibility for voice users through contextual text enrichment.

Motion | MongoDB, Express.js, React.js, Node.js, AWS

- Led development of a **full-stack web platform** with **React, Node.js, and MongoDB**, enabling geolocation-based event discovery and attracting a **100+ user waitlist**.
- Built **RESTful APIs and CI/CD pipelines** using **GitHub Actions, Docker, and AWS**, enabling automated testing and **zero-downtime deployments**.

FlightDB | Java, JDBC, PostgreSQL

- Designed a **relational database system** in **PostgreSQL** with transaction management and integrity constraints for flight reservations.
- Implemented **backend services in Java (JDBC)** supporting secure authentication, flight search, and transactional booking via a CLI.