

# Aagney Iyer

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## EDUCATION

### University of Washington, Paul G. Allen School

Seattle, WA

*B.S. Computer Science | Minor: Business | University Honors Scholar: Full Tuition Scholarship*

June 2026

**Coursework:** Discrete Math, Statistics, Security, Hardware/Software Interface, Data Structures & Parallelism, Algorithms, Operating Systems, Computer Vision, Systems Programming, Machine Learning, Databases

## EXPERIENCE

### Amazon

Aug. 2024 – Present

*Junior Software Engineer — Brand Protection Team*

Seattle, WA

- Pioneered a new AWS Fargate service in Java for legal risk prediction, handling 15,000+ daily Bedrock LLM calls.
- Leveraged AWS Sagemaker Ground Truth to classify branded text, using ElasticSearch to enhance an NER model.
- Modeled APIs and project infrastructure, including AWS SQS, ElastiCache, and CDK performance tradeoffs.

### Make4All Group

Jan. 2023 – Present

*Undergraduate Researcher — Speech and Natural Language Processing*

Seattle, WA

- Integrating multilingual captioning into web browsers via ASR translation techniques including OpenAI Whisper.
- Engineered an ADA-accessible app for self-directed hearing aid tuning using React, TypeScript, and Node.js.
- Achieved 25% improvement and presented to 150+ grant sponsors at Northwest Auditory Research Meeting.
- Developed a field research tool with Amazon EC2 and DynamoDB to store 45 users' audio and survey data.

### University of Washington Allen School

Aug. 2023 – Present

*Teaching Assistant — Database Systems*

Seattle, WA

- Teach SQL and data modeling lessons in discussion section, office hours, and online class forum.
- Developed a Java/Python project autograder, including color-coded diff analysis and dynamic test generation.
- Foster inclusive environment for 200+ diverse students, including non-native speakers.

### Accenture

June 2024 – Aug. 2024

*Software Engineer Intern*

Seattle, WA

- Automated fiscal report generation for a government eligibility system with 5.1M monthly users.
- Leveraged Python API for Apache Spark and MySQL to query 200,000 rows of metadata in Amazon S3.
- Ran jobs on Amazon EMR and EC2, ingesting Oracle data into data lake to optimize runtime by over 150%.
- Delivered two client-facing dashboards and Amazon RDS tables to production, saving BatchOps 2 hours weekly.

### University of Washington Academic Support Programs

Sept. 2023 – June 2024

*Peer Advisor*

Seattle, WA

- Offer support, resources, and success strategies to fellow Allen School students 1:1 in 30 minute sessions.
- Led 50+ sessions with 40 unique students, navigating sensitive conversations while maintaining professionalism.
- Present workshops to campus partners and engage in hiring committees for Allen School roles.

## PROJECTS

### ChatSLP | *DallE, CLIP, TypeScript, PostgreSQL, Git, GitHub DevOps*

Jan. 2025 – Mar. 2025

- Capstone software design project providing up to 50% less biased image generation for speech language pathologists.
- Developed a two-pass image validation system by integrating CLIP and GAN-based debiasing techniques.
- Designed a chat history feature with PostgreSQL, with a tagging and filtering system to organize chats by client.

### Relational DBMS | *Java, SQL*

Jan. 2024 – Mar. 2024

- Relational database manager built from scratch in Java, supporting basic SQL queries by concurrent users.
- Prevents deadlocks with a timeout-based mechanism and optimizes data retrieval with in-memory cache.

## TECHNICAL SKILLS

**Languages:** Java, Python, C, C++, SQL, JavaScript, HTML/CSS, Assembly

**Frameworks:** React, Next.js, Angular, Flask, FastAPI, Django, Selenium, Flutter, JUnit

**Developer Tools:** Git, Docker, Jenkins, Jira, Postman, Google Cloud Platform, Microsoft Azure, Amazon Web Services

**Concepts:** Machine Learning, Augmented Reality, Human-Computer Interaction, Data Science, Data Analysis, Software Engineering, Web Frameworks, Databases, Full stack, Frontend, Backend, Cloud Computing, Cybersecurity, Robotics, Parallel Programming, Virtual Memory, Multithreading, REST API, Statistics, Probability, Natural Language Processing