Alexander Metzger

https://sandergi.com

Seattle, WA 98195 alex@sandergi.com

EXPERIENCE

Koel Labs – Founder and CEO

Aug. 2024 – Present

- o Raised \$100K in grants (Mozilla, Microsoft, Google, Nvidia) for computational linguistics research.
- **Trained** SoTA NLP models, cutting streaming latency 60% and doubling accuracy.
- o Managed open-source team (4 engineers, 6 researchers from CMU/UToronto); oversaw MLOps on GCP.

Ubiquitous Computing Lab – Research Assistant

Jun. 2024 – Present

- o **Trained** computer vision ML models for sustainability; co-authored ACM IMWUT publication.
- o Improved crop yields by 18% by developing scalable Embedded ML platform using PyTorch.
- o Collaborated with Seismology researchers to reduce literature review times by 80% with Agentic RAG.

Gooey.AI – *Software Engineer*

Jun. 2023 - Sep. 2024

- o **Deployed** ML solutions to 10M+ farmers across 5+ countries, demoed to 193 world leaders at the UN.
- o Led 4-member intern team, merging 70+ PRs across production ML pipelines, teaching good API design.
- o **Optimized** inference on <u>GCP</u> & <u>Azure</u> using <u>Docker</u> w/ <u>Sentry</u> monitoring, improving reliability by 40%.

ICTD Lab – Research Assistant

Sep. 2022 – May 2024

- **Developed** Android + USSD platform connecting 10K farmers; co-first-authored ACM SIGCHI paper.
- **Presented** work to 100+ researchers across 3 talks; awarded 2025 CRA Outstanding Researcher.
- Reduced latency by 30% with MySQL and Redis, and data costs by 80x using domain specific compression.

EDUCATION

University of Washington − 4.00 GPA

Sep. 2024 – Jun. 2026

M.S. Computer Science, Meta Hackathon Winner, Next Entrepreneur, Graduate Compilers Teaching Assistant.

University of Washington – 3.87 GPA, 3.98 in CS

Sep. 2022 – Jun. 2025

B.S. Computer Science and Mathematics, DBF CS Lead, Accelerated Honors Math, UWSO First Violin Section.

PROJECTS

PAGE: Published a novel graph embedding <u>algorithm</u> with optimized <u>data structures</u> in C. Jun. 2025

YADES: Developed <u>YOLOv8</u> compression framework reducing power consumption by 10x. Jan. 2025

SCAT-Web: Built custom <u>health software</u> for 1K+ doctors & hospitals across 10+ nations. Oct. 2024

SAM: Wrote CLI + <u>NPM package</u> for automated SQLite schema migrations; 3K+ installs. Apr. 2024

AttendQR: Shipped SaaS attendance system (<u>Express.js</u> + <u>Braintree</u>) for 5 youth orchestras. Jun. 2023

CE Remote Learning Platform: Deployed software for 500+ students; certified 30+ tutors. Sep. 2022

Antenna Tester: Published <u>Windows Application</u> for Science Olympiad; 12K+ downloads. Feb. 2022

PROGRAMMING SKILLS

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

7+ years

Technologies: PyTorch, React, Docker, GCP, Azure, AWS, Git, Unix.

4+ years