

Miguel Aenlle

773-698-1458 | maenlle2@illinois.edu | miguelaenlle.com | linkedin.com/in/miguel-aenlle | github.com/miguelaenlle

EDUCATION

University of Illinois at Urbana-Champaign

Bachelor of Science in Computer Science

Expected: May 2027

Cumulative GPA: 4.0/4.0

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, C++, SQL, Swift, Java, HTML, CSS, Dart, MIPS, Verilog

Full-Stack: React, NodeJS, NextJS, Express, Django, REST APIs, WebSockets, MongoDB, MySQL, PostgreSQL, Redis

Data Science / AI: Python, PyTorch, OpenCV, NumPy, Pandas, Matplotlib, OpenAI, spaCy NLP, NLTK, Scikit-learn

Other: Git, GitHub, CI/CD, Jira, Confluence, Trello, Agile, Jest, GitHub Actions, AWS, Google Cloud, Azure, Linux

PROFESSIONAL EXPERIENCE

Software Engineering Intern, PrairieLearn, Inc.

Dec. 2024 – Present

- Redesigned staff navigation system across **80+** pages, enhancing experience for over **2,000** course instructors
- Engineered image-capture API delivering **1ms** captures for **180,000** students in high-stakes exams & assessments
- Accelerated manual grading process from **1 week to 1 hour** by creating LLM-driven handwriting grading pipeline
- Implemented UIs and API endpoints with TypeScript, React, HTML, CSS, WebSockets, PostgreSQL, and Python

Software Engineering Intern, PATHWAYos

Jun. 2023 – Aug. 2023

- Created work-based learning experience matching system for **500,000**-student platform with React & TypeScript
- Built low-latency Swift/MySQL API for opportunity matching via preferences, location, experience, & availability
- Iterated features based on feedback and peer reviews from engineering and product teams with GitHub and Slack

Software Developer, Normandy Remodeling

Aug. 2022 – Jan. 2025

- Architected cloud-based platform managing logistical and financial data on **33,000** customers and **9,900** projects
- Built frontend with React, CSS, and TypeScript, and backend with Node.js, Express, MongoDB, Jest, and Azure
- Automated document, email, and invoicing workflows for **100** employees via Azure & OneDrive/Office 365 APIs

RESEARCH EXPERIENCE

Software Developer, Google Summer of Code – Emory University

Jun. 2025 – Present

- Engineered ML pipeline to train and optimize automated MRI segmentation models with PyTorch and Linux
- Expanded limited proprietary training data by **1,600%** via custom-trained, state-of-the-art generative AI models
- Improved segmentation accuracy from **39%** to **80%**. Collaborated with Google and Emory University researchers

Undergraduate Researcher, University of Illinois Urbana-Champaign

Oct. 2024 – May 2025

- Developed AI model to inject imperceptible noise into audio, disrupting malicious audio deepfake attacks
- Implemented GPU-accelerated PyTorch pipeline for training and optimizing the model on **1,000+** speakers
- Collaborated with UIUC, Google, and Meta AI researchers to develop the audio defense technologies

LEADERSHIP AND ACTIVITIES

Web Team Lead, HackIllinois

Jul. 2025 – Present

- Leading redesign of site, registration, and admin web systems for UIUC's **1,000+** attendee flagship hackathon
- Revamping admin site, implementing features to streamline applicant, event, and sponsor data management
- Engineering web-based platform to automate corporate outreach task management across over **500** contacts

Software Developer, Reflections Projections

Mar. 2025 – Present

- Revamped sponsor resumebook, enhancing search, secure export, and rapid navigation of **2,000+** resumes
- Developed interactive, bespoke schedule, speaker, and Q&A pages for Midwest's largest collegiate tech conference

Software Developer, HackIllinois

Sep. 2024 – Mar. 2025

- Created site and registration system used by **1,000+** students and attendees with React, TypeScript, and NextJS
- Leveraged Notion, Figma, and GitHub to develop features collaboratively with developers and designers