

Emilio Andere

andere@uchicago.edu | github.com/technoabsurdist | linkedin.com/in/emi-andere | andereemi.substack.com

EDUCATION

The University of Chicago

B.S. in Computer Science, B.A. in Mathematics

Chicago, IL

Expected May 2025

- Honors: Phoenix Scholar (First Generation Student), Empower Scholar (90% Covered Tuition)
- Activities: President/Co-Founder at Blockchain Chicago, Founding member ChicagoDAO, Member Kappa Theta Pi.
- Relevant Coursework: Honors Computer Science I & II, Computer Systems, Computer Architecture, Discrete Mathematics, Honors Theory of Algorithms, Proofs Analysis, Abstract Linear Algebra, Accelerated Real Analysis (I, II, III), Abstract Algebra.

Cumbres International School

Guadalajara, Mexico

High School Diploma (Valedictorian, 3rd Place Jalisco Math Olympiad, 2nd Place Math PIBA International competition)

EXPERIENCE

Software Engineer Intern, Sphere Labs

July 2023 – September 2023

- Led the development of an on/off-ramp feature, achieving a monthly volume of \$100K in stable-coins to fiat-currency swaps.
- Engineered an API now integrated into the workflows of 30+ customers, streamlining bank account and payout functionalities.
- Onboarded Compass Bank, directly boosting yearly transaction volumes by ~\$1M and increasing customer base by 55%.
- Increased on-chain subscriptions contract reliability with unit testing and validation functionalities using Anchor and Rust.
- Boosted transaction volumes by 15% with a Coinflow-integrated micro-service built in NestJS for card-to-crypto conversions.

ML Research Engineer, Security, Algorithms, Networks, and Data Lab

January 2022 – December 2022

- Published in NeurIPS 2022, contributing to the machine learning field with research on "Natural Backdoors in Object Datasets."
- Aided in the development of an object-detection image classifier trained on ImageNet and OpenImages using TensorFlow.
- Extracted and plotted insights from a massive dataset (200GB) included as supporting figures in the published research paper.
- Improved internal graph analysis effectiveness by 20% by comparing ranking methods for evaluating/graphing physical triggers.
- Improved model robustness by identifying and mitigating the emergence of various spurious correlations in our trained models.

Software Engineer Intern, Impossible Finance

July 2022 – September 2022

- Boosted daily active users by 11% through the introduction of a React-based coin-staking protocol for liquidity pool filtering.
- Enhanced API response times by 19% via Redux-driven middle-layer state management, optimizing liquidity pool operations.
- Boosted user engagement by 25% by developing the back-end for the "learn-and-earn" feature using Postgres and Golang.
- Increased front-end visual coherency by 15% through iterative design enhancements, aligning closely with design prototypes.

Software Engineer Intern, Glip

September 2020 – March 2021

- Increased platform content by 130% through a Python-based tool for automated scraping and uploading of clips to aws servers.
- Expanded platform reach to 200+ Discord servers through an automated advertising and invitation bot built with discord.py.
- Enhanced back-end efficiency of video retrieval queries with caching methods, achieving a 16% reduction in content display time.

PROJECTS, HACKATHONS, AND AWARDS

- Transcription.ai: YouTube transcriptions with AI-generated titles, chapters, and summaries in over 50 languages. (Nov-Dec '23)
- Minimal-ML: Python package offering ML tools like language detection, chatbots, link transcriptions, and audio enhancements.
- Alma.ai: Full-stack live AI-based journaling platform with custom AI chatbot. Stack: TS, Express, React. (Sept-Oct '23)
- Natural Backdoor Datasets: NeurIPS 2022 Benchmarks track research paper "Natural Object Datasets" (Jan-Dec '22)
- Populus: Won \$4k at LionHack. Community orchestration tool. Stack: Solidity, React. (Nov-Dec '21)
- UChifi: 1st in UChicago Tech Showcase. Peer-to-peer network monitoring. Stack: TypeScript, React, Node.js. (Nov '22 - Jan '23)
- LIGA: UChicago Tech Challenge. Resume book tool. Stack: JS, React, AWS S3. (Mar-May '22)
- Schoolhouse.world: Founding tutor. Taught calculus and computer science to 200+ students around the world (March-Dec '21)

SKILLS

Languages/Tools: Typescript/Javascript (Node, React, Next, Nest), Python (Pandas, TensorFlow, NumPy, Django, Flask), C, Golang, Rust, SQL, Bash, Vim, Git.

Hosting/Database: Docker, AWS, SQL, Linux, Ubuntu, Relational Databases, Redis, BullMQ, Heroku, Postgres, MongoDB.