

# ANDREW LIN

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## EDUCATION

Emory University, Atlanta, Georgia

May 2023 - current

Bachelor of Science in Computer Science and Mathematics, Physics Minor

GPA: 3.97/4

**Relevant Coursework:** Data Structure & Algorithms, Data Base System, Machine Learning, Linear Algebra, Computer Architecture, Multivariable Calculus, Discrete Math, Physics I&II

## PROGRAMMING SKILLS

**Skills:** Retrieval Augmented Generation (RAG), Large Language Model (LLM), Gemini, Prompt Engineering, Vector Database (AlloyDB), AsyncIO, SQLAlchemy, GCP, Java, Python, HTML, CSS, C, Go, SQL, Spring Boot, Spring Security, Django, MongoDB, Flask, FastAPI

## EXPERIENCE

AI Software Engineer Intern, Magmutual Insurance

June 2025 – September 2025

- Developed a **LangChain-based RAG pipeline** with **VertexAI** embeddings and **AlloyDB** vector store, enabling attorneys to query 10,000+ case documents with accurate, source-cited answers.
- Engineered an automated risk-memo generation platform that **reduced attorney review time by 90%** and streamlined the end-to-end legal research workflow for complex medical malpractice claims.
- Improved LLM accuracy by 30% and reduced token costs by 85%** by designing a prompt-engineering pipeline with context caching.

CS Collaborator, Emory Natural Language Processing Lab

August 2024 - Present

- Implement data pipelines for natural language processing algorithms (Stanford CoreNLP, Gensim, Mallet) and visualization tools (WordCloud, spaCy) to derive meaningful and interpretable insights from large text corpora input.
- Contribute to frontend/backend through Django framework, bringing NLPsuite from desktop GUIs to a fully functional web platform.
- Assist students in setting up python, conda environments and installing the packages to run NLPsuite GUIs locally on their machines.

Emory Competitive Programming Club Assistant

September 2024 - Present

- Recruited new club members for Emory Competitive Programming Club and organize weekly training sessions on Monday and Friday.
- Organize and curate materials on data structure and algorithms for leetcode and codeforces problems worked through during lecture.

## PROJECTS

**Project Genoa: Analyzing Medieval Notary Records with Natural Language Processing**

- Clean and preprocess historical notary records from Genoa, removing irrelevant elements like book titles, end-of-page footnotes, and unhelpful content in Italian, while leveraging the lang\_id package to separate Italian and Latin text into distinct files for analysis.
- Implementing a comprehensive data pipeline incorporating spell checkers, file checkers, and the Stanza ConLL Table parser in NLPsuite to correct errors such as end-of-line hyphens, spelling mistakes, and ensure accurate textual data for further analysis.
- Developing the ConLL Table Analyzer for Stanza to process and structure text data into a standardized CoNLL format for syntactic and semantic analysis, allowing for in-depth extraction of economic, social, and trade networks in medieval Genoa.

**American Sign Language (ASL) Typing Test (Full Stack)**

- Won **First Place** at Emory Hackathon 2025 for accessible ASL gameplay design; developed dynamic, customizable interface themes.
- Utilized Flask framework, Flask-SocketIO, and OpenCV to deliver real-time gesture recognition with robust scoring mechanisms.
- Integrated Akram Adrane's pretrained ASL model with MediaPipe Hands for precise, frame-level alphabet detection via user webcam.

**LightSplit (Pure Backend)**

- Developed a web backend project that optimizes splitting travel costs in trips, utilizing Spring Boot, MongoDB, and RESTful services.
  - Implemented robust user authentication and authorization mechanisms using Spring Security and JWT, ensuring secure access to the application. Currently advancing role-based access controls for group-specific information to further strengthen security protocols.
- American Sign Language Detector

## AWARDS

- 1st place, Emory Hack 2025 (Computer Science Hackathon)
- 8th place, The 2024 ICPC Southeast USA Regional Contest Division 2 (2024)
- Regional 1st Place, NTNU high school debate competition (2023)
- 17th place, Taiwanese Economic Olympiad (2022)
- 2nd Place, NCCU Debate Novice Cup, National (2022)
- Top 7, Earth's New Voice, U20 International Youth Forum, National (2022)
- 2nd Place, Online Taiwanese Fingerboard S-K-A-T-E Game, National (2019)
- Regional 2nd Place, National Piano Competition, Piano Trio (2019)

## HOBBIES & INTERESTS

Passionate skateboarder; professional fingerboarder sponsored by Karat Fingerboard, the largest fingerboard brand in Taiwan, filmed a promotional fingerboard video with Vans this summer; Fall 2024 Intramural soccer champion at Emory; play classical piano, anime and movie theme song covers.