

Claire Chen

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EDUCATION

University of Illinois, Urbana Champaign

Expected Graduation: May 2026

Mathematics and Computer Science, B.S.

Grade: 4.0/4.0

Relevant Coursework: Data Structures · Computer Architecture · Rust and C++ · Abstract Linear Algebra · Statistics and Probability · Discrete & Fundamental Math · Complex Variables · Matrix Theory

EXPERIENCE

AMD — Disruption Lab *Software Engineer*

Jan 2024 - Present

- Optimizing AMD Mic performance by efficiently categorizing and removing unwanted noise leveraging DL algorithms.
- Constructing robust model to handle sources of different noise scales with reverberation and background noise.

ACM @ UIUC *Software Engineer*

Aug 2023 - Present

- Developed a resume book for companies to filter and network with students in Association for Computing Machinery.
- Handled login flow and backend, and linked and stored user information in AWS database with Boto3.
- Designed profile cards for each registered student displaying degree, skills, graduation year, etc.

A*Star *Software Engineer, Machine Learning Engineer*

Aug 2023 - Jan 2024

- Allowed operators to use natural language to query unstructured information in a knowledge base of financial information for an AI Fintech startup.
- Enabled efficient context formation in conversations and the ability to recall past conversations with no context loss by constructing novel knowledge graphs; cross tested loss and accuracy by implementing LLMs for the same task.
- Implemented accurate detection of pages with useful tabular data and PDF parsing by leveraging GPT-4 and Azure.

UC Santa Barbara Vision Research Lab *Computer Vision Research Engineer*

Jun 2023 - Aug 2023

- Conducted biomedical image analysis of distinguishing viral pneumonia COVID-19 from other forms of viral pneumonia through deep learning multi-class image classification.
- Innovated novel two layer stacked ensemble method incorporating transfer learning, hyperparameter tuning, image preprocessing, and ensemble learning that achieved 21.37% improved accuracy to baseline ResNet50.

Lynbrook Mobile App *Lead Developer*

Apr 2022 - Aug 2023

- Led mobile app development team and integrated school, student organization, faculty, and sports events onto the app.
- Liaised between student body, faculty, school board, and development team and handled requests from all clients to keep app prevalent to the student body; app assists 40 school-wide events, 20+ clubs, and serves 1.9k users annually.
- Worked with React Native and TypeScript, led team of 5 developers, and trained 3 underclassmen.

PROJECTS

SnackSafe App *React · Next.js · Supabase*

- Developed a lightweight web app that generates suitable restaurants for people with dietary restrictions.
- Populated restaurant data such as description, hours, distance, initial reviews, etc. in database using Yelp API.
- Implemented login flow using Supabase's Google OAuth Provider save their allergen preferences.

Gradient Boosting on Identifying Age-Related Conditions *Python · TensorFlow*

- Analyzed a dataset of over fifty anonymized health characteristics linked to three age-related conditions to predict patients' conditions for the InVitro Cell Research Company.
- Leveraged gradient boosting (CatBoost, LightBoost, XGBM) to build ML model and handled dataset imbalances.

TECHNICAL SKILLS

Languages: C++ · Python · Java · MIPS Assembly · JavaScript · TypeScript · HTML/CSS · Rust

Web Frameworks and Developer Tools: React Native · React · Docker · L^AT_EX · Typst · Linux · Git · GitHub Actions

Other Technologies: Firebase · Supabase · AWS · NumPy · PyTorch · TensorFlow · NextJS · Tailwind · Microsoft Excel