EJEAN KUO

925-701-1032 | ejeankuo2027@u.northwestern.edu | linkedin.com/in/ejeankuo/ | github.com/ejeankuo | ejeankuo.com

EDUCATION

Northwestern University

Evanston, IL

 $BA\ in\ English\ and\ Computer\ Science\ (Concentration:\ Artificial\ Intelligence)$

June 2027

- GPA: 3.92; Dean's List 6/6 Quarters; Kaplan Institute Scholar
- Coursework: Computer Systems (C, x86-64), Artificial Intelligence (Python), AI Narratives (C#), Computer Programming (C, C++), Discrete Mathematics, Object-Oriented Programming, Data Structures, Algorithms

EXPERIENCE

Climate Action Evanston

December 2024 - June 2025

Software Engineer Intern

Evanston. IL

- Designed and implemented a fullstack tracking form and data visualization extension for a non-profit's website supporting 2500+ users, centralizing data collection & display into one location, and reducing manual tracking efforts and reporting time by 40%
- Implemented a REST API in Node.js with cookie-based authentication to categorize volunteer submissions into 6 climate programs, ensuring efficient frontend updates after each submission, edit, or deletion
- · Created a form-based React.js frontend and Supabase backend enabling non-technical staff to add content displayed on the site
- · Coordinated Git version control with a team of 6 interns to smoothly collaborate and implement new features

Department of Computer Science, Northwestern University

May 2025 - Present

Evanston, IL

Undergraduate Researcher

- Selected in a competitive 20-student research cohort, collaborating with a mentor to present at the CS Research Showcase
- Developed and iterated on methodology for mathematical modeling software, maintaining detailed research logs and documentation

PROJECTS

Ranklit | Figma, Swift, Supabase, Open Library API

Summer 2025 - Present

- Built a full-stack iOS app for book tracking, enabling curated lists and personalized ratings through a pairwise ranking algorithm
- Developed user authentication flows (Log In/Create Account) with email + username support, syncing data to Supabase
- Implemented user-specific lists (Favorites, Want to Read) backed by Supabase RLS and book data from Open Library API

$\textbf{Ejean's Website} \mid \textit{React, JavaScript, HTML, CSS, Vercel}$

Fall 2025

- Designed a React.js website with modular component-structure, PDF downloading, & client-side routing to handle multiple views
- Deployed the side on Vercel with a custom domain, integrating media assets and responsive styling across desktop and mobile

Pacman Trainer | Python Summer 2025

- Created pathfinding engine with A* search in Python, delivering optimal navigation strategies and visualizations in Tkinter
- Trained reinforcement learning agents, applying Q-Learning to optimize policies and validate results through benchmark testing
- Designed probabilistic models to estimate hidden states from noisy data, improving agent's decision-making under uncertainty

Volunteer Form / Event Display Scoreboard | React, JavaScript, HTML, CSS, Figma, Supabase

Winter 2025

- Developed a sorted scoreboard with backend API calls to visualize volunteer contributions, improving visibility of climate activism
- Added separate workflows (create vs. edit) utilizing client-side routing and component structure

CTA Bus Tracker $\mid C, C++$

Fall 2024

- Created a navigation tool for an open street map of Evanston, listing the 3 closest buses to a given building with arrival times
- · Parsed map files using TinyXML to extract geospatial points and reconstruct buildings and paths for navigation
- Integrated Chicago Transit Authority's bus API to retrieve real-time bus locations and proximity to bus stops and buildings

LEADERSHIP & EXTRACURRICULAR

Develop & Innovate for Social Change

Spring 2025 - Present

VP of Finance

Northwestern University

- Secured 5 grants totaling \$6,500, a 160% increase in funding over 2 months, impacting 135+ students and 30+ clients
- · Managed purchasing operations via budget tracking, oversight of 4 bank accounts, and streamlined reimbursements

Mock Trial Collegiate Mock Trial Competitor

Fall 2023 – Present

Northwestern University

- Competed at UCLA, Georgetown, and UChicago, winning a bid at AMTA's 2024 Iowa Regional Mock Trial Competition
- Presented 7-min openings and cross-exams, demonstrating persuasive speaking, quick improvisation, and adaptation

TECHNICAL SKILLS & INTERESTS

Languages: Python, C++, C, Java, Swift, TypeScript, JavaScript, HTML, CSS, SQL, x86-64, LaTex

Technologies/Frameworks: React.js, Node.js, SwiftUI, Supabase, Figma, Git, VS Code, MS Office Suite, macOS, Overleaf, GTest