Aria Shi

ariashi@u.northwestern.edu | (978) 505-3178 | linkedin.com/in/aria-shi | github.com/ariashi15 | ariashi15.github.io/portfolio

EDUCATION

Northwestern University

Evanston, IL

B.A. in Computer Science and Economics

Expected June 2027

- **GPA:** 3.96/4.0 | Dean's List 6/6 Quarters
- Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Machine Learning, Computer Systems, Parallel Computing, Human Computer Interaction
- Activities: Fullstack Developer at DISC, Project Lead at Lambda Strategy, Community Development Chair of Chinese Students' Association, Tutor at NU Heights

EXPERIENCE

Capital One

June 2025 - Aug 2025

 $Software\ Engineering\ Intern$

McLean, VA

- Expanded account insights widget to support multi-type card decline alerts for 111,000 small business cardholders
- Refactored existing messaging infrastructure and insights API to seamlessly handle 5 different decline scenarios
- ullet Employed Agile methodologies and task tracking with Jira to collaborate efficiently with team of 4
- Leveraged Splunk, AWS Cloudwatch, and AWS DynamoDB to verify insight processing and delivery
- Implemented unit and component tests, conducted QA cycles, and deployed widget to production

Develop and Innovate for Social Change (DISC)

Jan 2025 – Aug 2025

Fullstack Developer

Evanston, IL

- Developed CRM system for North Shore Senior Center with team of 6 using React, Express, and Supabase
- Owned frontend design of 20+ pages; iteratively prototyped using Figma in close collaboration with client
- Led design and implementation of relational database schema for managing participants, activities, and users
- · Built role-based access control in compliance with HIPAA and admin dashboard to monitor platform activity

Northwestern University

Sept 2024 – June 2025

Teaching Assistant for CS110 and CS111

Evanston, IL

- Taught 10+ students object-oriented and functional programming through weekly office hours and tutorial sessions
- Led small-group discussions on topics surrounding ethics in technology such as accessibility and accountability

PrizeSole

June 2024 — Aug 2024

 $Software\ Engineering\ Intern$

Evanston, IL

- Developed iOS app with team of 4 from the ground up for e-commerce start-up using Swift and SwiftUI
- Designed UI from scratch using Figma, iterated on design to optimize functionality and improve user flow

PROJECTS

Image Contrast Stretcher $\mid C++, OpenMPI$

May 2025

• Leveraged MPI to parallelize a contrast stretching algorithm, achieving near-linear speedup (6x for 8 processes)

Farmstand | React, Tailwind CSS, Git, Express, PostgreSQL, Supabase

Apr 2025

- Led development of full-stack React app with team of 4 connecting local farmers to consumers in 24-hr hackathon
- Architected backend and APIs, designed a PostgreSQL database to model farms, products, and inventory
- Wrote 5 RESTful endpoints for fetching farm/product information and adding/updating inventory

Web Portfolio | React, Tailwind CSS, Figma

Jan 2025

• Built React web app with elements styled using Tailwind CSS to display personal projects and experiences

Open Street Map Navigator | C++, Google Test

Apr - May 2024

- Built a map navigator of Evanston; extracted definitions for landmarks; implemented support for map searching
- Integrated CTA bus API to provide real-time bus information for stops nearest to any given building

Python Execution Environment | C. Google Test

Mar - Apr 2024

• Developed an execution environment for Python including a parser, executor, and memory management module

SKILLS AND INTERESTS

Programming Languages: Python, C, C++, Swift, SwiftUI, JavaScript, HTML, CSS

Frameworks and Libraries: React, Node.js, Express, Tailwind CSS, NumPy

Tools and Technologies: PostgreSQL, Supabase, Unix, Git, Figma, Docker, OpenMP, OpenMPI, Jira, AWS Interests: Puzzles, NYT Games, Figure Skating, Poker, Sudoku, Drawing, Graphic Design, Traveling, Startups