Aria Shi

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EDUCATION

Northwestern University **Evanston, IL**
- GPA: 3.98/4.0 | Major GPA: 4.0/4.0 | B.A. in Computer Science and Economics *Expected June 2026*
- **Relevant coursework:** Data Structures and Algorithms, Discrete Math, Computer Programming with Python, Computer Programming with C/C++, Multivariable Differential Calculus
- **Activities:** Project Lead at Lambda Strategy, Cultural Chair of Chinese Students' Association

WORK EXPERIENCE

Northwestern University **Evanston, IL**
Teaching Assistant for CS 111: Fundamentals of Computer Programming *Sept 2024 – Dec 2024*
- Taught students the basics of functional and imperative programming through weekly office hours and tutorial sessions
- Led small-group discussions on topics surrounding ethics in technology such as accessibility, identity, and accountability

PrizeSole **Evanston, IL**
Software Engineering Intern *June 2024 – Aug 2024*
- 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, continuously iterated on design to optimize functionality and improve user flow
- Coordinated Git version control with team to collaborate smoothly on the implementation of new features

Lumos Debate **Lexington, MA**
Director *July 2021 – Aug 2024*
- Managed teams of 8+ instructors in sessions enrolling 40+ students, communicated with parents and rental contacts
- Delivered quality student experience rated on average 9.1/10 by adapting curriculum via daily meetings with instructors
- Evaluated and addressed students' strengths/weaknesses, wrote 450-600 word progress reports to parents for each student

PROJECTS

Web Portfolio | React Native, Tailwind CSS, Figma *January 2025*
- Built React web app with elements styled using Tailwind CSS to display personal projects and experiences

Pixel Sketchbook | JavaScript, HTML, CSS, Git, GitHub *September 2024*
- Developed an interactive pixel art sketchbook using HTML/CSS and JavaScript, with Git version control
- Implemented support for hover-to-draw functionality and opacity-based drawing to simulate layered strokes
- Created responsive and customizable grid layout, ensuring optimal rendering across screen sizes

Trip Planner | Data Structures Student Language (DSSL2), DrRacket *May 2024*
- Developed a trip planner from a DSSL2 interface, provided routing/searching services based on user-defined map data
- Selected, designed, and implemented data structures and algorithms from scratch to support 3 types of queries
- Produced design documentation including entity-relation diagrams, ethical considerations, and analyses of alternatives

Open Street Map Navigator | C++, Google Test *April – May 2024*
- Built a navigator for an open street map of Evanston, parsed map with TinyXML to retrieve node information
- Extracted definitions for buildings and footways based on nodes; implemented support for map searching using C++
- Integrated Chicago Transit Authority's bus API to provide real-time bus information for stops nearest to any given building

Python Execution Environment | C, Google Test *March – April 2024*
- Developed an execution environment using C for a subset of the Python language defined with BNF
- Built a recursive-descent parser to interpret Python code, identify syntax errors, and return error information for the user
- Implemented an executor that included support for function calls, binary expressions, assignment statements, and while loops
- Created a memory management module to write and read objects to memory; handled memory deallocation to prevent leaks

SKILLS AND INTERESTS

- **Programming Languages:** Python, C, C++, Swift/SwiftUI, JavaScript, HTML, CSS
- **Frameworks and Technologies:** React, PostgreSQL, Tailwind CSS, Unix, Git, Github, Figma, Google Test
- **Interests:** Figure Skating, Sudoku, Puzzles, Drawing, Graphic Design, Traveling, Entrepreneurship