Nicholas Walvoord

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EDUCATION

University of Michigan Ann Arbor

B.S.E in Computer Science and Engineering, Mathematics Minor

Expected May 2026

GPA: 3.96/4.0

• Coursework: Data Structures & Algorithms, Linear Algebra, Vector Calculus, Discrete Math

EXPERIENCE

Puppod Chicago, IL

Software Engineering Intern

May 2024 - Aug 2024

• Building Python machine learning dog attribute predictor and React.js front-end for user input and prediction display.

Atlas Digital Consulting

Ann Arbor, MI

 $Software\ Analyst$

Jan 2024 - May 2024

- Implemented in-house application and recruitment portal for new members with JavaScript and REST APIs, reducing convoluted 3+ platform and 6+ database process to a singular, efficient, and centralized web application.
- Developed novel front-end using React.js, JavaScript, HTML/CSS, and MUI components, in alignment with provided designs, building 20+ dynamic web pages that facilitated multi-round recruitment process.
- Engineered back-end functionalities with Google Firebase, Firestore, and Authentication services, outlining four access levels across search, grading, profile, home, and feedback pages, creating a backend scaling to 200+ applicants.

Saphran Inc. Ann Arbor, MI

Software Analyst

Oct 2023 - Dec 2023

- Constructed responsive data visualization dashboard tailored for asset planning and long-term profit forecasting utilizing JavaScript and JSON objects to filter 30,000+ lines of company data by 4+ key data features.
- Managed project timelines efficiently and communicated with project managers to save 20% development time.

Michigan Mentors

Ann Arbor, MI

Director of CS Program, Tutor

Sep 2023 – Present

- Produced and taught free intro to computer science summer program for high school students with 20+ participants.
- Designed and crafted program lecture and code exercise content consisting of 8+ units and 6+ weeks of material.
- Led personalized weekly school subject and standardized test tutoring sessions for 5+ students.

PROJECTS

Forum Posts Classifier

Apr 2024

- Designed and trained naïve Bayes machine learning classifier that reads and processes student posts via CSV files, calculates log-probability score of each post, and predicts labels for each given Piazza post with 87% accuracy (n=3000).
- Coded Map class in C++ on top of custom Binary Search Tree library and Iterator class to use as key data structures.

Euchre Card Game |

Feb 2024 - Mar 2024

- Engineered a software simulation of Euchre, utilizing C++ OOP principles, including ADTs and polymorphism.
- Developed AI player logic, terminal-based user interface, and customizable settings with 0-4 human players per game.

Text Editor |

Mar 2024 - Apr 2024

- Implemented a fully-functional text editor usable through a terminal-based visual editor, similar to Emacs and Vim.
- Generated custom C++ Linked List and Iterator classes for traversal and editing within text editor application.

SKILLS

- Languages: C++, JavaScript, HTML, CSS, Julia, MATLAB
- Technologies/Frameworks: React.js, TailwindCSS, Firebase, Firebase Authentication, Firestore, Git
- Interests: Swimming, Water Polo, Jazz & House Music, Wikipedia Browsing, NYT Games, Casio Watches