Nicholas Walvoord

US Citizen | (773) 308-4768 | nwlvrd@umich.edu | linkedin.com/in/nicholas-walvoord | nick-walvoord.dev

EDUCATION

University of Michigan — Ann Arbor, MI
B.S.E in Computer Science and Engineering, Mathematics Minor — Expected Graduation: May 2027
- **GPA:** 3.96/4.0
- **Coursework:** Operating Systems, Data Structures & Algorithms, Web Systems, Computer Architecture, Linux Pragmatics, Object Oriented Programming, Linear Algebra, Probability Theory, Math of Finance, Vector Calculus, Discrete Math

EXPERIENCE

Datadog — New York, New York
Software Engineering Intern - Integrations Developer Platform — May 2025 − Aug 2025
- Developed AI writing assistant with React frontend, Python API service, and LLMs, used by 25+ engineers monthly, reducing documentation team's review cycle by 2 days per integration for 800+ software integrations.
- Built fullstack platform asset syncing system with Python backend and PostgreSQL database to automate reviewer–engineer communication, shortening average time-to-market by 2 days for all new Datadog app integrations.
- Redesigned homepage with server-side search and filtering, improving scalability and UX for 45+ engineering end-users.

Michigan Mentors — Ann Arbor, MI
Co-Founder, Director of CS Program — Sep 2023 − Present
- Taught free intro to computer science summer course for high school students with 28+ participants. Created 6 weeks of original lecture content, curated problem sets, and special topics sessions on professional development.
- Led partnership with Columbia-affiliated nonprofit Aiphabet, doubling student enrollment and adding 4+ AI modules.

Puppod — Remote
Software Engineering Intern — May 2024 − Aug 2024
- Crafted end-to-end machine learning application to visualize and interpret data from 130k+ user game sessions.
- Developed backend API with Flask, Pandas, and scikit-learn's random forest regression model to serve user activity predictions and analysis front-end dashboards implemented in React.js and Next.js.

Atlas Digital Consulting — Ann Arbor, MI
Software Analyst — Jan 2024 − May 2024
- Implemented standalone recruitment portal for new members with React and Vercel, streamlining workflows and improving user experience by eliminating 4+ dependencies and automating member tasks, saving 20+ hours per recruitment cycle.
- Engineered back-end functionalities with Google Firebase, Firestore, and Authentication services, elevating app functionality by outlining admin, reviewer, member, and applicant levels of access and enabling platform scaling to 500+ applicants.
- Built 20+ web pages aligned with provided designs using React.js and MUI components, boosting total applications by 10%.

PROJECTS

Machine Learning Basketball Statistics & Analytics Platform — Jan 2025 - Apr 2025
- Constructed multi-modal computer vision pipeline to map basketball player and ball movements onto virtual court mini-map to track 10+ custom and traditional player and team statistics using Python for VC-backed startup Zephyr in team of three.
- Streamlined workflows for 4+ top-25 NCAA teams by formalizing metrics, cutting 2+ hours of manual work per game.

J.P. Morgan Chase Hackathon - ContribuTech — Oct 2024
- Spearheaded fullstack development of nonprofit board member sourcing and matching portal using Node.js and MongoDB back-end API methods to facilitate novel and scalable client matching algorithm for 500+ Delaware nonprofit organizations.
- Devised and assembled 10 dynamic React web pages with Google Oauth login, ensuring a secure and seamless user interface.

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 interface in C++ on top of custom Binary Search Tree and Iterator libraries to utilize as key data structures.

SKILLS & ADDITIONAL

- **Languages:** Python, C/C++, JavaScript/TypeScript
- **Frameworks/Technologies:** PostgreSQL, Node.js, React.js, React Native, Flask, Pandas, NumPy, scikit-learn
- **Interests/Hobbies:** Water Polo, Weightlifting, Amateur Cooking, Traveling the World, Jazz Saxophone