David Nguyen

Education

University of Michigan | Dean's Honors List

Expected Graduation: December 2027

B.S.E in Computer Science, Minor in Mathematics | GPA: 3.7

Ann Arbor, MI

Relevant Coursework: C++ Programming and Data Structures, Logic Design, Discrete Math, Linear Algebra,

Multivariable Calculus

Upcoming Coursework: Data Structures and Algorithms, Computer Organization, Probability Theory

Experience

VOID Tech January 2025 - Present

Software Developer

Ann Arbor, MI

- Engineered the backend infrastructure with a team of 3 developers for a subscription-based streaming platform, enabling users to stream God Said Give 'Em Drum Machines using **TypeScript** and **AWS Amplify** for scalability.
- Implemented authentication and authorization account management using AWS Cognito for secure sign-ups/logins and tracked user subscriptions status via AWS DynamoDB with PostgreSQL for gated media access.
- Integrated a video streaming infrastructure using MUX with signed URLs and thumbnail tokens to address authorized access concerns for paid users.

N2K November 2023 – July 2024

 $IT\ Intern$

Fulton, MD

- Developed an internal website using **HubSpot** and **Adobe Photoshop** to advocate **20**% of the company to acquire the ISC2 Certified in Cybersecurity certification for higher organizational cybersecurity credibility in the IT industry.
- Organized client data using Excel Sheets and audited the company's self-diagnostic products for simpler data analytics to acquire over \$200,000 from partnered companies and clients.
- Contributed to the development of cloud computing and cybersecurity online courses to assist their clients for IT examinations and become certified.

Springbrook High School

June 2023 – September 2023

IT Intern

Silver Spring, MD

- \bullet Troubleshooted and optimized over **600** previously distributed and broken student laptops to prepare **95%** of the laptops to the upcoming freshmen class.
- Configured the DNS and routed ethernet cables into hubs for multiple HP printers to enable optimal routing and usage for all staff faculties and students of over **2000** users.
- Revised over **50** different Boxlight Promethean boards and desktop computers with user-friendly interface for students and staff members.

Projects

 $\textbf{Trading Bot} \mid \textit{C++}, \textit{Python, FastAPI, Hugging Face, React.js, TypeScript, Tailwind CSS, PostgreSQL}$

- Architected a NASDAQ trading bot with responsive UI featuring charts with adjustable stop-loss values and statistics with execution metrics such as net profit and win rate percentage, backed by **PostgreSQL** for historical trade data.
- Integrated a low-latency C++ backend for trade execution with AI-driven reasoning and NASDAQ market forecasting using the OpenAI API and Hugging Face, enabling detailed strategy analysis and planning.

Ineedio | React.js, TypeScript, Tailwind CSS, Supabase

- Built a UI friendly internship tracking web application with 10 developers using to assist students' ability to organize their applications in a competitive setting with a leaderboard with measurements such as a user's total applications.
- Designed a dashboard page using **Supabase** for users to easily implement their own internship information efficiently and view the amount of active applications, total applications in a current time span, acceptance rate, and rejection rate.

Spotify Analysis | Python, Pandas, NumPy, Matplotlib

- Developed a recommendation engine using **Spotipy** to analyze top artists, genres, and listening duration, to suggest songs with similar listening patterns with other users.
- Visualized user's Spotify statistics using Matplotlib to assist the user discover trends and preferences.

Skills

Languages: C/C++, Python, TypeScript, HTML/CSS/JavaScript, MATLAB, Verilog

Technologies: React.js, Next.js, Tailwind CSS, PostgreSQL, Supabase, FastAPI, Pandas, NumPy, Git, AWS, Azure

Certifications: AWS Cloud Practitioner, Microsoft Azure Fundamentals, ISC2 Certified in Cybersecurity

Interests: Haircutting, Weightlifting, Stock Investing, Music, Vietnamese Culture