Michele Autorino

US Citizen | 804-332-7583 | ma152@illinois.edu | https://github.com/mikeyautorino2 | mikeyautorino.dev

Education

University of Illinois, Urbana-Champaign Expected Graduation: May 2027

Bachelor of Science in Computer Science & Statistics *GPA: 3.85/4.0*

- **Relevant Coursework**: Systems Programming, Statistics and Probability, Data Structures & Algorithms, Computer Architecture, Database Systems, Applied Regression and Design, Object Oriented Programming

Experience

Software Engineer Intern August 2025 - December 2025

PlayTogether *Remote*

- Refactored frontend and backend TypeScript code, optimizing GraphQL queries and reducing API latency by 10% improving maintainability for a team of 7 engineers
- Integrated Keycloak authentication into React login flows and hardened edge cases, reducing login-related errors by 20% for 10k+ users while improving reliability of production auth
- Architected and implemented a post-authentication user metadata caching layer, reducing login-adjacent request latency by 15% and lowering database load under peak traffic.

Researcher September 2025 – December 2025

Illinois Geometry Lab *Urbana, IL*

- Built Python data pipelines and simulation models on tens of thousands of games across multiple leagues to study skill vs. luck using pandas, NumPy, and scikit-learn

Software Engineer Intern May 2025 – August 2025

Electronic Visualization Lab *Chicago, IL*

- Developed a real-time 3D visualization system in C++ / Unreal Engine; profiled rendering and memory to achieve 2–3× frame-rate improvement (60→120 FPS)
- Deployed the tool to support 20+ researchers and graduate students, enabling immersive visualization and interactive exploration of scientific 3D environments

Projects

SlopCop - HackIllinois

Claude Code, GeminiAPI, JavaScript, Python, FastAPI, Google Firebase

- Chrome extension that filters low-quality YouTube content by running Gemini Flash inference on thumbnails and titles, classifying videos (clickbait, NSFW, etc) and hiding flagged results in the DOM to improve content quality
- Engineered a real-time classification pipeline using FastAPI, WebSockets, Firebase, and asynchronous batch processing, adding caching and LLM inference optimization to achieve low-latency filtering without degrading UX;

C Memory Allocator

C, GDB, Valgrind

- Implemented a high-performance dynamic memory allocator in C (malloc/free/realloc) using segregated explicit free lists and boundary tags to achieve O(1) coalescing, efficient block splitting, and low-fragmentation heap management
- Achieved 95% of glibc performance in allocator benchmark; ranked 30/300+ students in class contest

degenstock – HackPrinceton

Python, FastAPI, PostgreSQL, AWS (EC2, Amplify), React/Next.js, FAISS, OpenAI API

- Built an AWS-hosted FastAPI service that ingests Polymarket and Kalshi markets, normalizes team stats and opening odds in PostgreSQL, and runs similarity search with KNN and OpenAI/FAISS embeddings to surface historically similar and mispriced contracts
- Developed an analytics layer that reconstructs user positions, detects arbitrage, runs payoff simulations, and serves REST APIs consumed by React dashboards for price history and market comparisons

Skills & Additional

Programming Languages: Python, C/C++, JavaScript/TypeScript, Java
Technologies: AWS (Lambda, EC2, RDS), PostgreSQL, FastAPI, Node.js, GeminiAPI React.js, Next.js, Docker, Git, Linux
Interests: Soccer, Brazilian Jiu-Jitsu, Hiking, Meeting People, Romantic Comedies