David McDermott

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EDUCATION

BS, University of Michigan, *GPA: 3.73/4* (Expected 2026)

Double Major: Computer Science and Interdisciplinary Physics (Quantum Computing), LSA Honors College

- **Course Highlights:** Data Structures and Algorithms, Intro to Computer Organization, Foundations of Computer Science, Applied Linear Algebra, Honors Multivariable Calculus, Discrete Math, Web Systems, Methods of Theoretical Physics, Quantum Mechanics, Intro to Modern Physics, Quantum Nanotechnology
- **Clubs:** Traders at Michigan, Michigan Poker Club, Wolverine Sports Analytics, Quantum Science Research Lab, QuantUM, Kappa Theta Pi Professional Technology Fraternity, Society of Physics Students
- **Skills:** C++, C, Python, Numpy, Git, MySQL, Dart, HTML, CSS, Visual Studio Code, Linux (Ubuntu), Software Development, Data Analysis, Microsoft Office, Probability, Research, Math, Writing, Public Speaking

WORK EXPERIENCE

Data Analyst Intern, *Wilson Sporting Goods Co.* (May, 2024 – Aug, 2024)

- Wrote Python code to compile ~400,000 data points from diffuse records into a single, unified database
- Created a Random Forest Machine Learning model to classify football throw type with 85% accuracy
- Prototyped and developed novel data visualizations that were implemented in a new client-facing interface

Assistant Debate Coach, *Glenbrook South High School* (Aug, 2022 – Present)

- Lead strategy development for debaters ranked in top 15 teams in the nation at 5 tournaments a semester
- Produce research files on topics including emerging technology, macroeconomics, and public policy

Research Intern, *University of Illinois Chicago* (Apr, 2023 – Aug, 2023)

- Coded an interactive game to introduce quantum mechanics principles in Python using the Qiskit SDK
- Simulated network protocols demonstrating quantum supremacy is achievable over a quantum internet

EXTRACURRICULAR EXPERIENCE

Traders at Michigan, *Software Engineer* (Oct, 2023 – Present)

- Discuss trading strategy, market fundamentals, and applications of algorithms at meetings and events
- Attend educational sessions led by quants and software developers on finance and quantitative research

Wolverine Sports Analytics, *Project Team Lead* (Aug, 2022 – Present)

- Collaborate on projects applying computer and data science to predictive analytics in competitive sports
- Program Python scripts in Jupyter, utilizing numpy, Pandas, TensorFlow, and scikit-learn to find correlations

QuantUM, University of Michigan Quantum Club, *Cofounder* (Sep, 2023 – Present)

- Founded Michigan's only undergraduate club to introduce students to quantum science, with 30+ members
- Coordinate club meetings, recruit new members, invite guest speakers, and advertise events to drive turnout

Michigan Poker Club, *Member* (Aug, 2022 – Present)

- Participate in tournaments, home games, and strategy sessions on bet sizing, hand selection, and equity
- Apply probability and expected value calculations to deriving optimal strategies and maximizing return

PROJECTS

AI-enabled March Madness Prediction Algorithm (Winter, 2023)

- Created a deep neural network predicting the NCAA tournament; ranked in 84th percentile of ESPN brackets
- Led web scraping team, gathering 100,000+ data points covering every Division I team over past decade

Web Scraper for Policy Debate Scouting (Fall, 2022)

- Utilized BeautifulSoup to scrape statistics from collegiate debate tournaments in Python with Spyder
- Created and maintained a database in MySQL with statistics on over 500 opponents and judges

AWARDS

National Society of Collegiate Students (2023), National Merit Scholarship Finalist (2022), Baker Award Winner for Most Successful Debate Team in the Country (2022), Illinois All-State Debate Team Captain (2022)