Brian Wang

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SUMMARY

Highly motivated and experienced in software development, algorithmic problem-solving, and optimization. Able to learn new technologies quickly, build reliable applications, and collaborate effectively in Agile teams. Seeking Summer 2026 internships in software engineering, machine learning, quantitative research, or general technical roles.

EDUCATION

Worcester Polytechnic Institute Worcester, MA
B.S. Computer Science and Mathematical Sciences | *GPA: 4.0* | *Dean's List* | *Charles O. Thompson Scholar* 2024 - 2028

Relevant Coursework: Artificial Intelligence, Operating Systems, Numerical Methods, Stochastic Processes

SKILLS

Software & Tools: Docker, Git, GitHub, GitLab, AWS, scikit-learn, PyTorchm, NumPy, Pandas, Matplotlib, React, Node.js, MySQL, PostgreSQL, Jupyter, Figma, Machine Learning, Deep Learning, Power BI
Programming Languages: Python, Java, C/C++, MATLAB, R, JavaScript, HTML, CSS
Technical Skills: Full Stack Development, API Development (REST), Data Structures & Algorithms, Object-Oriented Design, Machine Learning, Agile & Scrum

PROJECTS

XPply: Gamified Internship Tracker | Course Project | Worcester, MA *Python, SQL, AWS, Flask, Agile/Scrum*

- Collaborating in a four-person Agile team to design and build a full-stack internship-tracking platform, converting stakeholder needs into well-scoped user stories and sprint deliverables.
- Architected the system's backend and designed a normalized relational database schema with 15+ interconnected tables, establishing scalable data flows across student, employer, posting, and XP-tracking modules.
- Built core REST API routes, schema migrations, and authentication workflows while coordinating with Peer Learning Assistants to refine acceptance criteria and improve system reliability.

Algorithmic Trading System Development | Undergraduate Research Project *Python, Prompt Engineering, ML/Stats*

- Self-directed a quantitative trading research initiative—iterating rapidly through failed hypotheses to develop five validated proof-of-concept intraday and overnight trading models.
- Engineered modular, cloud-deployed Python trading systems on QuantConnect capable of processing millions of equity and ETF data points, achieving strong risk-adjusted performance (**Sharpe 1.4; P/L ratio 1.75**).
- Applied prompt engineering, time-series analysis, optimization, and feature engineering to derive robust data-driven signals under dynamic market regimes.

Equity Research & Quantitative Portfolio Analysis | Independent Project *Python, Excel, Optimization*

- Conducted multi-factor equity research on AMD, NVIDIA, and Intel, quickly learning to extract and interpret institutional datasets using the Bloomberg Terminal.
- Developed Python- and Excel-based portfolio optimization frameworks that improved simulated performance by **10%** and reduced downside risk by **15%** versus equal-weight benchmarks.

EXPERIENCE

The Cone Concession Stand | Customer Service Team Lead | Cape Cod, MA Jul 2023 – Aug 2025

- Assisted and resolved service issues for hundreds of customers daily, while training $\sim$ 5 new employees per season and coordinating a daily team of 5 in a fast-paced, high-volume environment.
- Proposed and implemented marketing initiatives (posters, social media content) to enhance local visibility.

CERTIFICATIONS

C++ For C Programmers | **Python and Pandas for Data Engineering** | **Fundamentals of Quantitative Modeling**

ACTIVITIES & LEADERSHIP

Theta Chi Fraternity: Assistant Treasurer | **Investment Association:** Technology Sector Analyst | **SASE:** Peer Mentor | **SIAM:** Member | **Club Swimming & Tennis:** Athlete | **Interests:** Lifting, cooking, hiking, personal finance, productivity