Avery Joseph Clapp

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EDUCATION:

Johns Hopkins University **Expected 2026**

- **Majors:** Computer Science (BS), Economics (BA) *Baltimore, Maryland*
- **GPA:** 3.5/4.0
- **Coursework:** Networks, Data Structures, Algorithms, Parallel Computing, Operating Systems, Portfolio Management
- **Awards:** Pistritto Fellowship - $5,000 annual grant to JHU Computer Science students displaying research excellence

TECHNICAL SKILLS:

- **Languages:** Python, C, C++, SQL, TypeScript, JavaScript, Rust, CUDA
- **Frameworks/Libraries:** React.js, Node.js, Pandas, NumPy, Statsmodels, Dash, FastAPI
- **Technologies/Platforms:** Linux, Vim, Git, Jira, AWS, Kubernetes, Docker, gRPC, Bloomberg, CI/CD

WORK EXPERIENCE:

Garda Capital Partners **June 2025 – Present**

Software Engineer Intern *New York City, New York*

- Streamlined work of 60+ portfolio managers and traders through overhaul of critical data-intensive Dash application, utilizing Pandas, gRPC services, and REST APIs to facilitate real-time communication of 500,000+ data points
- Optimized complex SQL queries to handle production-level data volumes across distributed systems, aggregating prices, rates, and historical time series for numerous financial instruments while enforcing low-latency data delivery
- Cut database request times by 10% by implementing new core database interfaces firm-wide to handle async Python

Johns Hopkins Whiting School of Engineering **September 2024 – Present**

Machine Learning Researcher *Baltimore, Maryland*

- Spearheading development of a novel GPU-based Masked Matrix Multiplication algorithm in CUDA C++, targeting a 200% performance boost in Transformer AI workloads and 400% reduction in calculation overhead
- Applying advanced mathematics and linear algebra techniques for large-scale matrix operations, achieving 65% improvement in computational efficiency through fine-grained decomposition methods

NaviStone Inc. **May 2024 – August 2024**

Software Engineer Intern *Cincinnati, Ohio*

- Implemented Vue.js web application for data visualization, resulting in 20% increase in customer satisfaction
- Streamlined agile development workflow using Jira and Git automation, reducing feature delivery time by 40%

Institute For Applied Economics **May 2023 – January 2024**

Quantitative Developer *Baltimore, Maryland*

- Created 15+ trading algorithms with proprietary sentiment scores and gold price data to optimize risk-adjusted returns
- Achieved 275% algorithm return improvement through systematic parameter tuning and rigorous quantitative research
- Expanded subscriber base to 500+ paying users by developing a Telegram Bot delivering real-time trade signals

PERSONAL CODING PROJECTS:

Network Traffic Analyzer **C++**

- Developed multithreaded network analyzer with custom protocol parsing engine for Ethernet, TCP/IP, and UDP, achieving 30% latency reduction to process 5,000+ packets/second with sub-millisecond response times

Cryptocurrency Trading Platform **Python | React.js**

- Engineered end-to-end algorithmic trading platform on AWS cloud infrastructure, applying advanced data science techniques and leveraging 15+ metrics, statistical models, and public APIs to evaluate crypto markets

LEADERSHIP & ACTIVITIES:

Johns Hopkins Varsity Swimming, *Team Captain* **August 2022 – Present**

- Balanced 20 weekly training hours with rigorous course load, achieving 18 NCAA All-American Honors

Student Conduct and Ethics Board, *Selected Member* **April 2024 – Present**

- Championed ethical conduct on campus by promoting accountability and respect, leading to fewer code violations

Scouts of America, *Eagle Scout* **September 2015 – May 2021**

- Spearheaded 100-hour service project, coordinating 20+ volunteers and fundraising to renovate local church trail