Owen Fulton

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EDUCATION

University of Colorado at Boulder

August 2017-May 2021

College of Engineering and Applied Sciences (Engineering Honors Program): B.S. Computer Science **Cumulative GPA:** 3.83/4.0

• Relevant Courses: Algorithms, Computer Systems, Operating Systems, Network Systems, Software Development and Tools, Data Structures, Data Science, Cybersecurity, Computer Graphics, Discrete Math, Datacenter Scale Computing

TECHNICAL SKILLS

Languages: F#, Python, C++, Java

Cloud Platforms: AWS, Google Cloud Platform

Tools & Technologies: Docker, Terraform, Bitbucket Pipelines, NServiceBus, Apache Pulsar, Datadog

EXPERIENCE

LAB Quantitative Strategies, Denver, CO

July 2021-Dec 2023

Software Engineer II

- Architected and developed an automated trading system for futures and commodities products used across multiple strategies and accounts. Designed for high fault-tolerance, scalability, and auditability with an event-driven micro-service architecture using F# and NServiceBus. System handled concurrent batches of hundreds of orders averaging in daily transactional volume over \$10 million.
- Created CI/CD pipeline for the system consisting of Terraform infrastructure for provisioning AWS services and Bitbucket Pipelines for code build, testing, and deployment. Optimized pipeline to under 5 minute deployments with .NET and Docker caching and parallel micro-service builds and deployments.
- Leveraged .NET frameworks TickSpec and FSUnit in creating BDD tests to improve business visibility of critical system functions and involve domain experts in testing order construction scenarios.
- Promoted to lead project engineer responsible for feature development in collaboration with research and compliance teams. Managed a production support team for trading multiple-international markets.

Software Engineer I

- Developed a containerized Java Spring Boot API server to proxy order and position data from an external order management platform to internal services. Created a scalable solution that handled concurrent requests and optimized response times using thread-safe write operations and non-blocking retrieval.
- Built out portfolio analysis tool in Python for live intraday monitoring of model exposures, positions, orders, and profit/loss. Implemented multiprocessing to enable quick processing of data provided to frontend visualization tools.

Lockheed Martin Space, Littleton, CO

Aug 2020-May 2021

Undergraduate Intern

- Project Member supporting the Testbed and Simulation (Tb&S) use of AI/ML models to transform the design, development, production, testing and operations of space-based systems.
- Contributed to a tool using Clang's Abstract Syntax Trees with Python to statically analyze key inputs & outputs from C++ models.

CERTIFICATIONS

- AWS Certified Solutions Architect Associate (2023)
- Machine Learning: Fundamentals and Algorithms (Carnegie Mellon, 2022)
- AWS Certified Cloud Practitioner (2021)