

Corey Gallagher

coreygallagher1194@gmail.com | 651-246-6694 | [linkedin.com/in/corey-gallagher](https://www.linkedin.com/in/corey-gallagher) | github.com/coreygallagher1 | coreygallagher.dev

WORK EXPERIENCE

Software Engineer | FlexTrade, New York, NY

07/2023 - Present

- Direct the technical implementation and onboarding, troubleshoot production issues, and drive feature development for 3+ asset managers with \$2 billion in combined AUM, enhancing client satisfaction and system reliability.
- Craft Python and Go scripts for seamless integration with trading and portfolio management gRPC APIs, used to place up to 20,000 orders per day streamlining trade processes and increasing order efficiency by over 1200%.
- Automate trade and portfolio exports in Scala, creating custom integrations that replace 9 manual file transfers that run daily, saving 18+ hours weekly, and increasing reliability with external fund managers.
- Integrate Barra risk models into custom Scala views, equipping portfolio managers with precise risk assessments and decision-enhancing analytics, saving clients over \$1 million a year in analytics fees and risk development.
- Architect logic for dynamic position allocation, driving advanced asset management strategies on the firm, fund, and portfolio level, boosting asset distribution efficacy across up to 80 different portfolios and 20 Prime Brokers.

Research Software Engineer | Marquette University, Milwaukee, WI

01/2023 - 05/2023

- Partnered with Feeding America to develop a machine learning-powered interactive app using RShiny, PyTorch, and spectral clustering, grouping Wisconsin foodbanks using historical data to tackle food distribution challenges.
- Engineered predictive formulas for food bank clusters, enabling real-time assessment of food shortage risks. This proactive approach enhanced resource management and delivery accuracy for food banks and logistics partners.
- Deployed app, now crucial for data-driven decision-making in Feeding America's operational strategy.

Software Engineer Intern | Direct Supply, Milwaukee, WI

05/2022 - 05/2023

- Spearheaded an e-commerce product refresh strategy, employing AWS Lambda, DynamoDB, and JavaScript, achieving a 1504% improvement in data accuracy and error correction for key products within 48 hours.
- Developed a Python-based AWS Glue ETL process with a custom JavaScript library for efficient S3 data extraction.
- Revolutionized the node.js API development framework, enabling real-time metrics on e-commerce products and upgrading legacy endpoints with AWS Lambda and DynamoDB, significantly boosting performance and scalability.
- Automated Google Shopping product feed integration with AWS Lambda and Glue, transforming time-consuming manual ETL processes and saving over 1850 hours annually, enhancing productivity and operational efficiency.

Software Engineer Intern | Leidos, St. Paul, MN

05/2021 - 08/2021

- Implemented C++ unit tests, boosting test coverage and reducing manual effort.
- Conducted UX testing, identifying, and addressing user experience issues to refine UI design.

EDUCATION

Marquette University, Milwaukee, WI

09/2019 - 05/2023

Bachelor of Science, Double Major in Computer Science and Computational Mathematics. Comp. Sci. Major GPA: 3.62

Extracurriculars: Association for Computing Machinery (ACM), Chess Club

SKILLS

Programming Languages: Python, Go, JavaScript, Java, Scala, SQL, C/C++, R,, HTML, CSS

Tools: gRPC, Kafka, Cassandra, MySQL, Docker, Kubernetes, Redis, AWS, GraphQL, REST, PyTorch, Node.js, Next.js, Pandas

PROJECTS

Currency Arbitrage Analytics Engine | <https://github.com/coreygallagher1/CurrencyArbitrageAnalyticsEngine>

02/2024 - Present

- Programmed a real-time currency arbitrage detection system with Flask and PyTorch enabling analysis of global market discrepancies using Docker and Kubernetes for robust microservice orchestration and scalable deployment.

Untether Loan Micropayments Application | <https://github.com/coreygallagher1/Untether>

10/2022 - Present

- Fabricated a React micropayment app with Plaid API, facilitating electronic purchase round-ups for debt reduction.

EXTRACURRICULARS

Software Engineer | Milky Way Tech Hub, Milwaukee, WI

09/2022 - 05/2023

- Pioneered website development, integrating a lifecycle assessment tool for startups using React and ChatGPT API.

Wisconsin High School Programming Competition Judge | Association for Computing Machinery

10/2019 - 05/2023

- Devised and judged programming challenges for 400+ students, enhancing contest quality and educational impact.

INTERESTS

Traveling, Exercising, Cooking, Hiking, Chess, Personal Finance, Reading, History, Video Games