- Spearheaded the automation of the Short Term Interest Rates Trading desk in New York, guiding several junior programmers and collaborating closely with Traders to understand their requirements, pricing strategies, and business use cases.
- Designed and implemented key pieces of automated pricing infrastructure, enabling the auto-pricing of over 75% of all in-scope client inquiries by quantity, and over 50% by daily notional value.
- Utilized Vert.x to create reactive, event-driven, Java applications and microservices, with a strong emphasis on being scalable and asynchronous to ensure responsiveness for large amounts of traffic driven by electronic trading.
- Used Zipkin and other internal tracing tools to debug and optimize our automated pricing system, reducing pricing times by over 80%, maximizing win percentages for in-competition client trades.
- Worked with our Systematic Market Making Traders to improve pricing algorithms and stability for our Treasury bills automated pricing system, leading to double-digit reductions in lost profit on competitive client trades.

Software Engineer, Intern Goldman Sachs May 2018 – Aug 2018

- Developed a system in Java to display the firm's inventory of bonds in the form of tabular data published through a rendezvous protocol.
- Leveraged existing REST API endpoints with Vert.x to filter and enrich large-scale data-sets for consumption in new services and applications that will replace legacy systems.
- Worked closely with team members to solve problems facing traders and salespeople, through bug fixes and designing new software.
- Designed and implemented QA tests on non-production servers before releasing code into production, along with unit testing via JUnit and Mockito.

Teaching Assistant

University of Connecticut

- Coordinated class material for CSE 1729 (Introduction to Principles of Programming in Scheme).
- Designed and implemented tests for automatically grading student lab and homework assignments.
- Proctored and evaluated exams, and held office hours.
- Ensured that students understood core concepts: functional programming such as lambdas and recursion, data structures such as lists and binary search trees, and sorting algorithms.

Education Storrs, CT

University of Connecticut

Aug 2015 – May 2019 3.55 GPA

Jan 2017 – May 2019

- Awards/Honors: Dean's List Honors

- B.S. in Computer Science, Mathematics Minor

Skills

- Languages & Tools: Java, Vert.x, Git, Vim, working proficiency with Python, TypeScript, React.js

- Fluent in English and Portuguese; Proficient in Spanish; Elementary in French