

Samuel Meshoyrer

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EXPERIENCE

Morgan Stanley

Technical Lead, *Trading Risk Controls – Algorithmic Trading*

New York, NY

Since Aug. 2018

- Led project to develop process (C++) which monitors swap flow and proactively acquires short-sell stock locates as part of US swap aggregation regulatory requirements
- Subject matter expert of the Dynamic Limits Allocator (C++), an enforcer of in-band aggregate notional value limits by modeling client spending and budget as a resource allocation problem
- Expanded global footprint of DLA and consolidated several deployments to better capture clients' full equity flow
- Led team across New York, Montreal, Budapest, and Shanghai to widely increase functionality of application while decreasing average operational latency from 3ms to 0.5ms through multithreading and software rearchitecting
- Coordinated the creation of an automated testing suite (Python) between development, monitoring, and integration teams

Geneva Energy Markets

Software Engineer

New York, NY

July 2017 – July 2018

- Developed position management software (C#) capable of aggregating positions from multiple exchanges, reconciling over-the-counter trades, and generating market-on-close schedules
- Created an internal trading tool (C#) and accompanying GUI for on-the-fly reconfiguration which enabled seamless, "one-click" transfer of position between options and futures books
- Administered database and developed several robust extract-transform-load pipelines using triggers (SQL) to supplement position management software
- Oversaw technical compliance (EMIR, MiFID II, Basel III) and created automated systems (Python, C# Windows services) for position and audit trail reporting

Princeton University, Department of Economics

Research Consultant, *Free Law Project*

Princeton, NJ

Jan. 2016 – May 2018

- Constructed text-based authority measures on labor union contracts and merged them with data on state labor laws and NLRB cases
- Performed analysis and machine prediction (Python) of judge decision quality using the text of appellate court cases
- Scraped case sites (LexisNexis, Westlaw) to create open legal corpus (MongoDB)

Columbia University, Department of Computer Science

Teaching Assistant, *Computing in Python – Class size: 200*

Teaching Assistant, *Data Structures in Java – Class size: 350*

New York, NY

Sept. 2016 – May 2017

Jan. 2015 – May 2016

- Worked with instructor to create course curriculum, homework, and exams
- Handled administrative duties for the course and managed the other teaching assistants
- Led recitations which reviewed class material and previewed advanced coursework

EDUCATION

Columbia University, The Fu Foundation School of Engineering and Applied Science

M.S. in Computer Science – *Software Systems*

Emphasis on distributed systems, operating systems, and software engineering, GPA: 4.0

New York, NY

Expected May 2024

B.S. in Computer Science – *Intelligent Systems*

Minor in Applied Mathematics

Emphasis on machine learning, data science, and natural language processing

May 2017

TECHNICAL SKILLS

Programming Languages:

C++/C, Python, C#, SQL, Bash, Haskell, Java, Go

Technologies:

Large-scale distributed systems, Internet protocols, Object-oriented design, Concurrent & Event-driven computing, Linux Kernel Development, Database Administration, Unix, Windows, Git, Perforce