

Experience

Onaroll

Head of Engineering

New York, NY

March 2020 – Present

- Led the engineering team to quickly iterate on product features and provided strategic partnership to help the business establish product market fit.
- Established modern software engineering best practices including unit testing, integration testing, DevOps, CI/CD, and an agile development process.
- Recruited, retained, hired and trained engineers while fostering a strong engineering culture.
- Designed and developed core functionality used by end-users and internal staff.
- Built a data pipeline to support analytics, enabling data gathering, reports for customers and dashboards to track company KPIs.

Troops.ai

Senior Software Engineer

New York, NY

November 2018 – February 2020

- Led multiple projects to build and enhance product features to support customer needs.
- Developed access control features required for enterprise deployments.
- Managed and collaborated with DevOps contractors to automate cloud infrastructure deployment and security.
- Built a system to monitor infrastructure and applications with automatic alerts and escalations upon degradation.
- Improved scalability of data syncs and alert trigger architecture.
- Leveraged Kubernetes infrastructure and deployment mechanisms to make it easy for other engineers to deploy code.

Scala Computing

Chief Technology Officer

New York, NY

May 2018 – November 2018

- Redesigned system architecture to enable faster delivery, scalability and robustness.
- Responsible for hiring and recruiting product and DevOps engineers.
- Brainstormed, prioritized and managed the product roadmap.

Jet.com

Senior Director of Engineering - Fulfillment

Hoboken, NJ

July 2014 – April 2018

- As one of the earliest hired engineers, bootstrapped the supply chain, fulfillment and transportation systems from scratch being the only backend engineer for the first 8 months.
- Leveraged the CQRS/ES architecture pattern to build fully distributed systems running on the Azure cloud platform.
- Developed initial version of the boxing algorithm (JetPack) and guided other developers taking it to the next generation utilizing genetic algorithms and machine learning.
- Provided technical leadership and mentoring to the product and technology organizations.
- Strategically hired strong engineers to construct 3 solid engineering teams which focused on fast paced feature delivery using Agile methodologies.
- Managed several teams of developers (up to 18 people) by making sure they are growing and performing well in their roles.
- Coordinated hiring and geo-redundancy technology initiatives.
- Guided strategic initiatives to utilize Jet technology on the Walmart platform.
- Developed expertise in cloud technologies, distributed systems, microservice architecture, F#, functional programming, technical and people leadership.

Angelo, Gordon & Co
Consultant

New York, NY
December 2013 – July 2014

- Developed a middleware tier including a REST API for data querying and caching.
- Created an F# DSL to automate authorization permissions.
- Improved data retrieval by implementing querying APIs and LINQ providers.
- Enhanced the build and deployment process for applications and modules.

BlueMountain Capital Management LLC
Quantitative Strategist

New York, NY
June 2011 – November 2013

- Built an interactive research and data analysis platform in F# facilitating quick implementations of trading strategies, backtests and reports. Integrated with Excel, R and internal systems.
- Implemented C# and F# data structures and APIs for easy data and time-series manipulation.
- Integrated an internal order management system with third party execution platforms via FIX, using C#, WPF and SQL.
- Developed a document tracking system for analysts to collect, organize and distribute notes, views and research about companies.
- Assisted building a new distributed market data system based on Java and Cassandra database.
- Created various tools, reports, and UI editors to make risk and operation teams more productive.

QVT Financial LP
Software Engineer

New York, NY
September 2008 – May 2011

- Developed an Order Management System which allows portfolio managers and traders to track the progress of their orders in near-real time.
- Worked with the CEO to develop a set of custom Blackberry applications to query portfolio positions, Profit and Loss (P&L), live and historical prices.
- Built a custom modular dashboard application loosely based on Bloomberg Launchpad, allowing a user to save their layout and state of the individual modules.
- Developed an internal facebook application complete with photos, profiles and seating charts for the different QVT offices around the world.

National Security Agency
Operating Systems Division, Windows Team
Global Network Exploitation and Vulnerability Analyst

Ft. Meade, MD
February 2007 – August 2008

- Performed source code security analysis and reverse engineered operating systems and 3rd party products.
- Discovered and documented vulnerabilities and presented them to vendors for patching.
- Developed tools to aid the discovery of bugs and vulnerabilities in software.

United States Army
Computer Scientist

Fort Monmouth, NJ
July 2006 – January 2007

- Conducted vulnerability assessments and composed risk analysis reports of military systems.
- Headed the Certification and Accreditation effort as a project lead for a satellite system.

Federal Bureau of Investigation
Honors Internship Program

Washington, DC
June 2005 – August 2005

- Analyzed vulnerabilities of malware and published a report to the Intelligence Community.

Skills

Programming: F#, C#, Scala, Java, Python, TypeScript, React, C/C++, Haskell, SQL
Cloud Providers: Azure, AWS, Google Cloud Platform
Operating Systems: Windows, Linux, Mac OS X
Software: Visual Studio, ReSharper, Git, Reflector, WinDbg, Bloomberg, VMWare, MS Office
Distributed Systems: Kubernetes, Docker, Kafka, Elasticsearch, EventStore, CosmosDB, Consul

Education

NYU Tandon School of Engineering, Brooklyn, NY
Master of Science in Computer Science, May 2006. GPA: 4.0/4.0

NYU Tandon School of Engineering, Brooklyn, NY
Bachelor of Science in Computer Science, May 2006. GPA: 3.8/4.0