

Education	<ul style="list-style-type: none"> ◦ BA, Cornell University, cum laude in mathematics, May 2001 ◦ PhD, University of California at Davis, mathematics, Dec 2007 ◦ MS, Rutgers, mathematical finance, Jan 2014
Highlights	<ul style="list-style-type: none"> ◦ Built and maintained production systems handling large amounts of funds ◦ Worked in multiple jobs with strong testing culture
Employment	<ul style="list-style-type: none"> ◦ APY Finance Aug 2020 - current, <i>Lead Solidity engineer & devops</i> <ul style="list-style-type: none"> • Created contracts and deployments for governance token and liquidity mining with 80 million USD in total value locked. ◦ Capital One Apr 2019 - Nov 2020, <i>Senior engineer / tech lead</i> <ul style="list-style-type: none"> • As hands-on lead for Python-based access to data lake, plan roadmap, create work items, maintain best practices in coding and testing. • Collaborate cross-functionally with data scientists and machine learning group to gather requirements for environments ranging from laptops to distributed clusters. ◦ LoanStreet Inc. Mar 2018 - Feb 2019, <i>Senior software engineer in financial technology</i> <ul style="list-style-type: none"> • Re-architected loan syndication tech stack using domain-driven design. • Managed work items for a team of 4 and gathered requirements. • As hands-on lead, wrote core Python libraries for event-sourced microservices communicating through RabbitMQ & REST, created Docker configurations, and set standards from code quality to Git workflow and CI. ◦ MIO Partners (McKinsey & Co subsidiary) Mar 2016 - Feb 2018, <i>Quant developer for trading</i> <ul style="list-style-type: none"> • Created Python-based portfolio management tools which are used interactively for analysis and as components in report-generation processes deployed in Docker containers. • Created and maintained daily trading opportunity charts reviewed by the CEO. Data was processed from a variety of sources including emails and databases. • As project manager, gathered requirements for a web app (React JS and Python), coded back-end computations, and managed two front-end developers. ◦ JP Morgan Chase Mar 2015 - Mar 2016, <i>Quant developer for regulatory capital</i> <ul style="list-style-type: none"> • Automated Excel and Access-based manual processes as robust server processes, with event-driven GUI, using proprietary Python-based environment (Athena). • Frequent communication and signoffs from business users were required, with careful documentation showing accuracy of results. ◦ Nomura Feb 2014 - Mar 2015, <i>Front office developer for electronic trading</i> <ul style="list-style-type: none"> • Created a low-latency order book generator that used Tibco Rendezvous to aggregate market-data and pricing and communicate with smart order router and GUI (Java/Linux). • Primary maintainer of automated market-maker for USD swaps and swap futures. • Created a FIX trade feed from ION trading platform into trade management system. ◦ Nomura 2013, <i>Intern for equities connectivity team</i> ◦ University of California, Davis 2012 Lecturer <i>Head instructor for courses in calculus, linear algebra, and probability</i> ◦ Bard College, BHSEC program 2009 - 2011, Assistant Professor <i>Oversaw the development of accelerated math curriculum for early college program.</i> ◦ University of Victoria 2008 - 2009, PIMS Postdoctoral Fellow <i>Conducted mathematical research in low-dimensional topology</i>
Personal	<ul style="list-style-type: none"> ◦ Naturalized U.S. Citizen; moved to the U.S. at age eight.