

EXPERIENCE

Tech Lead **Bridgewater Associates** **Mar 2023 - Present**

- **AI Investment Analyst (Python)**
- **Investment Programming Languages Team (Scala)**
- **Greenfield Compiler Team (Rust, Typescript)**
- Design and lead development of AI Analyst: core technology for Bridgewater's Agentic AI strategy
- Pocket Analyst is used by 200 investors, saving 3 man years in first 6 months. Bridgewater projections expect 1 man-month saved daily by 2027
- Pocket Analyst is used as the core technology for Bridgewater's Agentic Fund
- Build agentic code assistant tooling used by 200 investors across Bridgewater
- Maintain business-critical legacy Data Analytics platform for investment engineers

Senior Software Engineer **Luminous Computing** **Jan 2022 - Mar 2023**

- **Hardware Software Co-design Team, Office of the CTO (Python, Haskell)**
- Compiled Transformer and Recommender models to custom architecture (SPMD and MPMD)
- Built XLA/MLIR transpiler to custom ML ops and architecture
- Design and implement custom DSL for analysts to instantiate hand-constructed models
- Stand up CI and infrastructure for dev team across multiple projects

Software Engineer **Forward Networks** **Feb 2020 - Jan 2022**

- **Programming Languages Team (Java, Scala, Haskell)**
- Maintain NQE: a pure, lazily-evaluated querying language for never-programmed network engineers
- Troubleshoot and review customers' NQE queries; teach new users to use NQE
- Design and develop NQE features: pretty printer; type checker; IDE; module support; optimizer

Senior Capstone Project **Harvey Mudd College** **Sep 2018 - May 2019**

- **Senior-year group research project for industry stake-holder**
- Received *Clinic Team Award for Outstanding Performance* (1st place amongst 23 teams)
- Co-authored (team of 4) 100-page paper on motion-parallax-based 3-D experiences

Self-Directed Research **Claremont McKenna College** **Sep 2018 - May 2019**

- **Human Consumable Poker Solvers using ML (Python)** - authored thesis paper on using ML for abstracting poker solver outputs and usage in educational tools

SPEAKING ENGAGEMENTS

LangChain Interrupt 2026 (San Francisco) **May 2026**

- *Presented the architecture and design of Bridgewater's Pocket Analyst, attended by ~500*
- <https://www.youtube.com/watch?v=IXZb21CfelY>

EDUCATION

Claremont, CA **Claremont McKenna College** **Sep 2015 - Dec 2019**

- **Major:** Computer Science (B.S.) via Harvey Mudd College
- Teaching assistant for Programming Languages course