

- PROFESSIONAL EXPERIENCE**
- Senior Manager, Data Engineering at Poloniex* April 2022 - Present
Manager, Data Engineering at Poloniex April 2021 - March 2022
- Built out high-seniority, 4-person Data Engineering team to perform comprehensive rehaul of legacy ELT systems, while also managing 5-person Data Analyst group
 - Migrated in-house data processing service to new event-driven, DBT-based platform, hosted on AWS services (Redshift, ECS/Fargate, DMS, MSK, SQS)
 - Introduced streamlit, Apache Superset, & DeepNote, enriching analytics reporting
- Principal Data Science Engineer at Teikametrics, Inc.* July 2019 - April 2021
Senior Data Science Engineer at Teikametrics, Inc. December 2017 - July 2019
- Served as tech lead for 12-person Data Science group, providing technical vision and mentorship to drive successful projects
 - Architected core machine learning training and serving platform atop AWS SageMaker, allowing rapid prototyping with CI/CD pipelines (see “Conferences”)
 - Adapted and improved existing Scala-based automated bidding technology to new advertising products, directly enabling over \$1m/yr in additional revenue
 - Created transformer- & RNN-based deep learning models for regression and control
- Software Engineer at Curata, Inc.* April 2017 - November 2017
- Within R&D, leveraged NLP, ML, and optimization techniques to develop and bring new features from conception to production, using Jupyter, nltk, spaCy, and d3.js
- Software Engineer at Skyscanner, Ltd.* May 2013 - February 2017
- Performed business-critical operations for Sequoia-Capital-backed startup, contributing to a successful \$1.7bn exit; produced codebase audit requisite to acquisition
 - Maintained highly-available web scraping platform and Python framework, parsing over 10 GB/s of data to serve more than 5000 requests/second
 - Created AST-based tooling allowing real-time code analysis, manipulation, generation, and automated quality assurance in multi-million line legacy Python codebase
- EDUCATION**
- University of Edinburgh:** *MSc. Artificial Intelligence* 2015 - 2016
 Specialism in Natural Language Processing
 Dissertation: [Applying Statistical Language Modeling to Genetic Programming](#)
- University of Edinburgh:** *MA Hons. Cognitive Science* 2011 - 2015
 First-class honours
 Dissertation: [Understanding Referential Coordination as a PSO Task](#)
- SKILLS**
- Code: Python, Scala, SQL, Haskell, Matlab
 - Data: PostgreSQL, Snowflake, Airflow, DBT, Protobuf, Avro, XPath, Hadoop
 - Build/Deployment: Docker, AWS, Heroku, CircleCI, RPM
- CONFERENCES & LECTURES**
- 2023.** [“AI Art: Under the Hood.”](#) Barn Gallery. Ogunquit, ME, USA.
2020. [“Painless Machine Learning in Production.”](#) EuroPython 2020. Online.
2018. [“Exploring the Python AST Ecosystem.”](#) EuroPython 2018. Edinburgh, UK.
2015. Stevens, H. C. & Rohde, H. “Modeling Referential Coordination as a Particle Swarm Optimization Task.” The 19th Workshop on the Semantics and Pragmatics of Dialogue. Gothenburg, Sweden.
- SELECTED OPEN-SOURCE PROJECTS**
- [bellybutton](#): linting engine for Python, allowing custom rulesets via AST queries
 - [monkeys](#): strongly-typed genetic programming framework
 - [hypothesis-protobuf](#): property-based testing utility for Protocol Buffer messages
 - [avro2py](#): Apache Avro schema code generation tool for Python