

PROJECTS

- **QuantSoftware Toolkit:** Open source python library for financial data analysis and machine learning for finance.
- **Github Visualization:** Data Visualization of Git Log data using D3 to analyze project trends over time.
- **Recommendation System:** Music and Movie recommender systems using collaborative filtering on public datasets.
- **Mac Setup:** Book that gives step by step instructions on setting up developer environment on Mac OS.

EXPERIENCE

- **JibJab Studios** Marina Del Rey, California
Software Engineer May 2017 - Present
 - **Tensorflow:** TensorFlow is an open source software library for numerical computation using data flow graphs; primarily used for training deep learning models.
 - **Apache Beam:** Apache Beam is a unified model for defining both batch and streaming data-parallel processing pipelines, as well as a set of language-specific SDKs for constructing pipelines and runners.
- **Ocean Networks Canada** Victoria B.C.
Senior Software Engineer Jan 2014 - Oct 2016
 - **Notifications:** Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
 - **Nostos:** Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.
 - **Workflows:** Dataduct an open source workflow framework to create and manage data pipelines leveraging reusable patterns to expedite developer productivity.
 - **Data Collection:** Designed the internal survey and crowd sourcing platform which allowed for creating various tasks for crowd sourcing or embedding surveys across the Coursera platform.
 - **Dev Environment:** Analytics environment based on docker and AWS, standardized the python and R dependencies. Wrote the core libraries that are shared by all data scientists.
 - **Data Warehousing:** Setup, schema design and management of Amazon Redshift. Built an internal app for access to the data using a web interface. Dataduct integration for daily ETL injection into Redshift.
 - **Recommendations:** Core service for all recommendation systems at Coursera, currently used on the homepage and throughout the content discovery process. Worked on both offline training and online serving.
 - **Content Discovery:** Improved content discovery by building a new onboarding experience on coursera. Using this to personalize the search and browse experience. Also worked on ranking and indexing improvements.
 - **Course Dashboards:** Instructor dashboards and learner surveying tools, which helped instructors run their class better by providing data on Assignments and Learner Activity.

EDUCATION

- **University of Victoria** Victoria B.C. Canada
Masters of Applied Science in Computer Engineering May. 2015 – Dec. 2016
- **University of Victoria** Victoria B.C. Canada
Bachelor of Engineering in Computer Engineering Sept. 2010 – Apr. 2015