

EDUCATION

- **Oregon State University** Corvallis, OR
Bachelor of Science in Computer Science; GPA: 3.98 *September 2019 – March 2024*

EXPERIENCE

- **Google** Mountain View, CA
Software Engineer *Oct 2016 - 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.
- **Coursera** Mountain View, CA
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.
- **Lucena Research** Atlanta, GA
Data Scientist *Summer 2012 and 2013*
 - **Portfolio Management**: Created models for portfolio hedging, portfolio optimization and price forecasting. Also creating a strategy backtesting engine used for simulating and backtesting strategies.
 - **QuantDesk**: Python backend for a web application used by hedge fund managers for portfolio management.

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.

PROGRAMMING SKILLS

- **Languages**: Scala, Python, Javascript, C++, SQL, Java **Technologies**: AWS, Play, React, Kafka, GCE