Jonathan Jin

Experience

Twitter

Member of *Twitter Cortex*, working on machine learning platform and infrastructure.

Machine Learning Software Engineer

08/2018 - Present, New York

- Core contributor to <u>ML Workflows</u>, Twitter's platform for productionizing ML deployment pipelines
- Leading long-term effort to address workflow "composability"—the ability to rapidly experiment with, prototype, and iterate on machine learning productionization pipelines (see Speaking)
- Implemented tight integration and interoperability between the ML workflow engine and <u>Deepbird</u>, Twitter's TensorFlow-based model training/evaluating/serving framework

Uber

Member of <u>Observability Applications</u>, working on forecasting and anomaly detection for time series metrics.

Software Engineer

07/2016 – 07/2018, New York

- Re-architected time-series metric forecasting pipeline to support concurrent batch backfilling; reduced asymptotic burden on <u>underlying data store</u> by ~90% (see <u>Writing</u>)
- Extended anomaly detection platform to support multiple forecasting models; carried out migration to intercommunicating services with zero downtime and full backwards compatibility (see Writing)

OkCupid

Software Engineer

07/2015 - 07/2016, New York

Skills

Languages: Go; Python; C++; Java; Bash; Matlab/Octave; R; C

Infrastructure: Apache Airflow; Apache Aurora; Apache Thrift; Apache Cassandra

Education

Columbia University

Independent Graduate Coursework

September 2017 – December 2017

Noteworthy Coursework: Machine Learning

University of Chicago

B.S. Computer Science, B.A. Economics

September 2011 - June 2015

Speaking

"ML Workflows at Twitter: Lessons Learned"

Al NEXTCon, New York, 2019

Writing

Implementing Model-Agnosticism in Uber's Real-Time Anomaly Detection Platform Engineering a Job-based Forecasting Workflow for Observability Anomaly Detection

Uber Engineering Blog Uber Engineering Blog

Projects

derain-net

WIP: A reimplementation of the deep-network-based technique for single-image rain-removal developed by Fu, Huang, Ding, Liao, and Paisley (<u>arXiv:1609.02087v2</u>).