JONATHAN JIN

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SELECT WORK EXPERIENCE

Hinge

Staff Machine Learning Engineer, AI Platform

New York, NY, Apr 2024 - Current

Leading the platformization of Hinge's disparate AI/ML efforts.

Humane Intelligence

Engineering Advisor

New York, NY, Feb 2024 - Current

"Fractional" tech lead and architect. Partner with the CEO to define and execute on engineering strategies, including hiring and vendor selection. Contribute in hands-on capacity for technical proofs-of-concepts.

Spotify

Senior Machine Learning Engineer

New York, NY, Mar 2021 - Mar 2024

Senior member of the ML Platform organization; contributed to and maintained Hendrix, Spotify's centralized machine learning platform. Primarily focused on managed multi-tenant compute infrastructure for Kubeflow and Ray in GCP. Later shifted focus to AI/ML governance and artifact/experiment management solutions.

- Evaluated Ray for adoption into the Hendrix platform in collaboration with the maintainer team at Anyscale; informed the development of Hendrix's initial centralized multi-tenant Ray instructure based on KubeRay;
- Spearheaded development of Backstage-based model governance solution in collaboration with non-technical stakeholders (Legal and Trust & Safety) in preparation for the EU Digital Services Act;
- Brought Hendrix's flagship Kubeflow-based orchestration product to general availability; defined multi-quarter engineering roadmap in collaboration with product and engineering stakeholders spanning infrastructural (SLOs, observability) and user-facing (documentation, API cleanliness) needs.

NVIDIA

Senior Systems Software Engineer, AI Infrastructure

New York, NY, Dec 2019 - Jan 2021

Worked on AI infrastructure for autonomous vehicle research and development.

- Implemented prototype for horizontally-scalable model-parallel training for multi-task learning using parameter server approach based on Ray and Horovod;
- Implement custom Kubernetes scheduler for preemptible workloads and resource reservations in an on-prem GPU cluster.

Twitter

Machine Learning Software Engineer

New York, NY, Aug 2018 - Dec 2019

 $Member of \ Cortex, \ Twitter's \ central \ ML \ platform \ organization. \ Worked \ on: \ workflow \ orchestration; \ experiment \ management/iteration; \ and \ overall \ ML \ engineering \ productivity.$

• Enabled distributed training of TensorFlow models in Apache Mesos from an Airflow pipeline via Deepbird, Twitter's TensorFlow-based model training/evaluating/serving framework

EDUCATION

University of Chicago B.S. Computer Science, B.A Economics

2011 - 2015

SPEAKING

TWIMLcon AI Platforms, "How Spotify is Navigating an Evolving ML Landscape with Hendrix Platform"

Oct 2022

MLconf, "Empowering Traceable and Auditable ML in Production at Spotify with Hendrix"

Mar 2022

KubeCon + CloudNativeCon, "Scaling Kubeflow for Multi-tenancy at Spotify"

Oct 2021

SKILLS

- Machine Learning and Data: Ray, PyTorch, Apache Spark, Apache Flink, MLflow, Apache Airflow, Kubeflow, TensorFlow
- Infrastructure and Distributed Systems: Kubernetes, Terraform, Prometheus, gRPC, Docker
- Enterprise Platforms: Amazon Web Services (AWS), Google Cloud (GCP), Databricks
- Programming Languages: Python, Go, C++, Java

Last Updated: 2024-07-19. Also available at: https://jonathanj.in