# **JONATHAN JIN**

me@jonathanj.in linkedin.com/in/jinnovation github.com/jinnovation huggingface.co/jinnovation

## SELECT WORK EXPERIENCE

**Humane Intelligence** 

Feb 2024 – Current

New York, NY

Engineering Advisor

• Working as a "fractional tech lead" to define engineering roadmap and steer full-stack development efforts.

Mar 2021 – Mar 2024

New York, NY

Senior Machine Learning Engineer

- Worked on Hendrix, Spotify's centralized ML platform;
- Contributed to technical evaluation of Ray for adoption into the Hendrix platform; collaborated with the Ray maintainer team at Anyscale to identify functionality gaps and steer Ray development roadmap, e.g. of Ray AI Runtime; informed the development of Hendrix's initial centralized multi-tenant Ray instructure based on KubeRay;
- Spearheaded development of Hendrix Registry as part of company-wide AI/ML governance initiative; collaborated with stakeholders in Legal, Trust & Safety, etc. to deliver a Backstage-based model card solution, resulting in over 100 models registered by 40 teams company-wide in less than a quarter;
- Brought Hendrix's flagship Kubeflow-based orchestration product to general availability; defined multi-quarter engineering roadmap in collaboration with product and engineering stakeholders across ML Platform and user teams; contributed to increase in Hendrix adoption of 50% and increase in measured user satisfaction of 10%;
- Active mentor and career coach to junior IC team members across the ML Platform org. Successfully identified and carved out long-term areas of ownership for two junior ICs that have since become defining pillars of their respective careers.

**NVIDIA** Dec 2019 – Jan 2021

 $Senior\ Systems\ Software\ Engineer,\ AI\ Infrastructure$ 

New York, NY

- Worked on AI infrastructure for autonomous vehicle research and development;
- Initiated development of solution for "hybrid data/model parallelism" using a Ray-based parameter server design and Horovod to enable horizontally-scalable multi-task training;
- Co-delivered a Kubernetes-based scheduling mechanism to enable priority access to cluster resources for select use cases, e.g. prep for upcoming external demos, via virtual "resource shares".

Twitter Aug 2018 – Dec 2019

Machine Learning Software Engineer

- New York, NY
- 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"

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

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

Oct 2022 Mar 2022 Oct 2021

## **SKILLS**

- Programming Languages: Python, Go, C++, Java
- Machine Learning and MLOps: Ray, Kubeflow, Airflow, TensorFlow, TensorFlow Extended (TFX)
- Infrastructure and Distributed Systems: Google Cloud (GCP), Kubernetes, Terraform, Prometheus, gRPC, Docker