

# Xander Song

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## ABOUT

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A versatile problem-solver whose skill set spans backend development, machine learning and ops. Proven track record of accelerating existing processes and taking greenfield projects from zero to one. Driven and self-motivated with a growth mindset and team-first mentality.

## SKILLS

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**Languages/Tools:** Python, Docker, TensorFlow, GitHub Actions, MongoDB, Apache Beam, GCP

## EXPERIENCE

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### Machine Learning Engineer

San Francisco, CA

*test.ai*

*Jan 2020 - May 2022*

- Launched a no-code tool for creating functional UI test cases (\$700K ARR, seven enterprise clients and >700 public downloads) as a member of the core platform team at an early-stage startup.
- Enabled robust navigation of app under test using an “application graph” with screen similarity algorithms to identify state and shortest-path and Q-learning to guide automation.
- Uncovered ~20 unique bugs for a video game streaming platform ahead of their public launch by testing at scale with Docker and Kubernetes, using >150 parallel runners to monitor ~100 games across ~20 data centers.
- Increased throughput for batch experimentation 10x by building a scalable feature extraction pipeline using Apache Beam with Google Cloud Dataflow and leveraging containerized training.
- Automated and accelerated our core product’s build process by 5x, using GitHub Actions to package our download client and build installers for Windows and MacOS.

### Artificial Intelligence Fellow

San Francisco, CA

*Insight Data Science*

*Jun 2019 - Dec 2019*

- Studied artificial intelligence and machine learning engineering at a merit-based fellowship program.
- Compressed the size of a PyTorch music generation model by 3.5x with only marginal loss in output quality using weight quantization.

### Machine Learning Researcher

Los Angeles, CA

*UCLA Applied Math Research Experience for Undergraduates*

*Jun 2017 - Aug 2017*

- Predicted with 93% accuracy the setting of officers in LAPD body-camera recordings using hand-crafted features and semi-supervised learning.
- Scaled experiments to a data set of 100 labeled recordings containing 14 hours of footage and 1.5M frames of video on a cluster at UCLA.

## EDUCATION

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### University of California, Santa Barbara

Santa Barbara, CA

*B.S. in Mathematics*

*Sep 2015 - Sep 2018*

### University of California, Berkeley

Berkeley, CA

*B.A. in Philosophy*

*Aug 2009 - Dec 2013*