Jonathan Yin

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Education _____

Yale University

Double major in Computer Science and Statistics & Data Science, GPA: 3.98/4.0

- Selected coursework: Distributed Systems, Parallel Programming, Randomized Algorithms, Deep Learning, Intermediate Machine Learning, NLP, Algorithms, Data Structures, Financial Economics, Linear Models, Probability & Statistics Theory, Discrete Math
- Took leave of absence after junior year to work on startup with funding from Y Combinator

Experience _____

Lifelike (YC S23)

CO-FOUNDER

- Took a leave of absence from Yale to build Lifelike with \$500k funding from Y Combinator, a top startup accelerator
- Launched one of the first real-time low-latency AI phone calls, and scaled to over 300,000 total users with Next.js, FastAPI, AWS ECS, Elasticache, and MySQL
- Served high-volume production traffic from self-hosted LLMs with vLLM and SGLang and built a custom image generation inference library, incorporating various techniques like regional prompting, IP Adapter, and ControlNet
- Fine-tuned LLMs and diffusion models (like Llama 3 and FLUX) to build the first real-time visual roleplay platform with character/scene consistency

Benchling

Software Engineering Intern

- Integrated chemical editor into the electronic lab notebook, allowing users to design molecules or chemical reactions within notebook entries
- Created endpoints to convert finalized chemical structures from notebook entries into registered entities usable across the platform
- Feature released to enterprise customers as part of September 2022 release

Octant

MACHINE LEARNING RESEARCH INTERN

- Used graph convolutional networks for molecular property prediction to determine efficacy of drug synthesis pipeline
- Built similarity search tool to optimize which products to synthesize for secondary screening rounds based on hits from primary screen
- Applied K-means and UMAP to developed tool to visualize, cluster, and interactively explore high-dimensional molecular features

Broad Institute of MIT and Harvard - Regev Lab

MACHINE LEARNING RESEARCHER

- Worked on improving GPCR binding prediction with compressed sensing, Bayesian methods, and machine learning
- Developed novel deep learning architecture to create more meaningful latent molecular representations
- Paper accepted and selected for oral presentation at 2020 NeurIPS workshop, Learning Meaningful Representations of Life

Conferences

Learning Meaningful Representations for Life

NEURAL INFORMATION PROCESSING SYSTEMS (NEURIPS) 2020 WORKSHOP

- Yin J*, Chung H*, Regev A. A multi-view generative model for molecular representation improves prediction tasks (paper)
- Combined multimodal representation learning with variational autoencoders to improve latent molecular representations (talk)

Skills

LanguagesPython, TypeScript, C/C++, Go, R, Java, HTML, CSSLibraries/FrameworksNext.js, FastAPI, Flask, TensorFlow, PyTorch, NumPy, Pandas, Matplotlib

Jun. 2021 - Aug. 2021

Jun. 2022 - Aug. 2022

San Francisco, CA

Emeryville, CA

Jan. 2019 - Dec. 2020

Cambridge, MA

Dec. 2020

May. 2023 - Nov. 2024

San Francisco, CA

Sept. 2020 - May 2025