PATRICK YIN

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EDUCATION

University of California, Berkeley — B.A. Computer Science, GPA: 4.0 August 2019 - Present

- Regents' and Chancellor's Scholar — Merit-based scholarship for the top 2% of undergraduates at UC Berkeley
- Coursework: ML, DL, AI, Probability, Optimization, Algorithms, Parallel Programming, Computer Architecture

EXPERIENCE

Ambi Robotics — Machine Learning / Computer Vision Engineer Intern January 2022 - Present

- Working on improving the computer vision system which powers Ambi's parcel sorting system, AmbiSort.
- Spearheaded efforts in utilizing real-world production data for training, upgrading Ambi's computer vision system to use 3D neural networks, and creating rigorous A/B testing protocols and statistical analyses.

Berkeley AI Research — Undergraduate Researcher July 2020 - Present

- Working under the supervision of Prof. Sergey Levine on reset-free robotic learning, planning, and RL. Previously worked on applying offline RL in autonomous driving. Published two papers (see below).

UIPath — Software Engineer Intern June 2021 - August 2021

- Worked on UiPath Insights. Pushed over 30 Git commits to production.
- Developed Snowflake/SQLServer connections and queries using C# and .NET Core to capture data from bots.
- Created and deployed Kubernetes jobs calling Looker API to authenticate users and manage client dashboards.

PUBLICATIONS

Kuan Fang*, **Patrick Yin***, Ashvin Nair, Sergey Levine. "Planning to Practice: Efficient Online Fine-Tuning by Composing Goals in Latent Space". *In Review.*

Philippe Hansen-Estruch, Amy Zhang, Ashvin Nair, **Patrick Yin**, Sergey Levine. "Bisimulation Makes Analogies in Goal-Conditioned Reinforcement Learning". *In Review.*

PROJECTS

Lucent

- Developed a web application that allows users to create automatable workflows for data exploration/processing
- Underwent rapid product iteration by reaching out and pitching to employees from CROs, Gilead, and Oracle
- Tech Stack: MERN Stack, Dagster, Flask, Pandas, Plotly, TypeScript, HTML/CSS, Redux, Python

Phyzmo

- Constructed a cross-platform application tracking moving objects and creating visuals based on recorded data for students in physics labs—published to Apple Store
- Tech Stack: GCP Vision API, GCP Cloud Functions, GCP Storage, OpenCV, Firebase, Python, Java, Swift

Absent

- Launched an iOS app coaching non-native speakers to improve their accent by analyzing their accent through voice recordings and providing feedback using word-level confidence analysis
- Tech Stack: GCP Speech-to-Text API, GCP Cloud Functions, GCP Storage, Firebase, Python, Swift

SKILLS AND INTERESTS

Languages	Python, C/C++, Java, JavaScript/TypeScript, Swift, HTML/CSS, SQL, Bash, Powershell
Frameworks/Tools	PyTorch, Tensorflow, GCP/AWS/Azure, CUDA, OpenMP, Docker, Kubernetes, React, Git
Interests	reading, podcasts, chess, running, basketball, lofi, 3D printing, AR, guitar, Mandarin