

# Alex Dils

Berkeley, CA | dils@berkeley.edu | linkedin.com/in/alex-dils | github.com/axel-slid | Google Scholar

## Education

### University of California, Berkeley

May 2029

- B.A. in Computer Science
- GPA: 3.7/4.0
- Machine Learning at Berkeley (ML@B)

## Experience

### CTO & Co-Founder, Appraise AI — Berkeley, CA | appraiseai.co

Nov 2025 – Present

- Raised **\$15K** in pre-seed funding.
- Architected a **multimodal AI pricing engine** (vision + NLP) delivering resale price predictions with **>95% top-3 accuracy**.
- Built a scalable **data ingestion pipeline** (Scrapy, Playwright) collecting **500K+ new listings/day**.
- Led technical strategy and engineering execution; supported early enterprise discussions with marketplaces (eBay, Rebag®, Poshmark®).

### Research Intern, Stanford Center for Biomedical Informatics Research — Remote

Jun 2022 – Present

- Developed **bias-mitigation techniques** to reduce spurious correlations in skin-lesion segmentation models.
- Simulated lung motion with finite element analysis (FEA) to model breathing-cycle variation; generated augmentations that **improved Dice by >0.05** on tumor segmentation.
- Contributed to Digital Twin research **featured on Stanford Medicine's homepage**.
- Tools: Python, FEniCS, PyTorch, Pandas, NumPy, TensorFlow, SimpleITK, Slurm, PIL, Jupyter, Conda, OpenCV, Keras, scikit-learn.

### Coding Teacher, StreetCode Academy — Remote

Jan 2024 – Jan 2025

- Designed and taught a Python curriculum to 30+ students in underserved elementary schools across four 8-week cohorts.

### Chess Teacher, Kodely — Menlo Park, CA

Jan 2024 – Jan 2025

- Led after-school chess workshops for elementary and middle school students across 3 school districts.

### Summer Camp Counselor, Rally Gymnastics LLC — San Carlos, CA

May 2023 – Apr 2024

- Taught gymnastics fundamentals and led daily activities in a safe, structured environment.

## Publications

### Enhancing Medical AI with Physiologically-Informed Data Augmentation

Jan 2026 (Expected)

ICML 2026 submission (pending)

Christoph Sadée, **Alex Dils**, Cally Lin, Audrey Chun, Francisco Carrillo-Perez, Preya Shah, et al.

### Eye For An Eye: A Deep-Learning and Analytical Method to Spatializing Stereoscopic Images

Apr 17, 2025

National High School Journal of Science

**Alex Dils\***, Jake Yoshinaka, Leo McDonnell \*all authors contributed equally

### Microplastic Identification Using AI-Driven Image Segmentation and GAN-Generated Ecological Context

Oct 27, 2024

arXiv preprint

**Alex Dils**, David Raymond, Christoph Sadée, et al.

### Addressing Bias and Confounders in AI-based Image Diagnosis - A Study of 117,610 Skin Lesions

Jan 2, 2025

Cell (In revision)

Christoph Sadée, Serena Zhang, **Alex Dils**, et al.

### Integrating Mechanistic Knowledge into Deep Learning for Improved Cancer Detection

Jun 16, 2024

FEniCS Conference 2024 Proceedings

Christoph Sadée, Katherine Hartmann, **Alex Dils**, et al.