

Andy Wang

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EDUCATION

Stanford University, School of Engineering

BS in Biomedical Computation

MS in Computer Science (AI Track)

GPA: 4.06 / 4.00

Palo Alto, CA

June 2026

December 2026

EXPERIENCE

Flatiron Health

Machine Learning Intern – Incoming

New York, NY

June 2025 — September 2025

Computational Precision Oncology Lab — National Institutes of Health

Machine Learning Research Intern

Bethesda, MD

June 2024 — September 2024

- Developed a vision foundation model method to predict chemotherapy response from tumor biopsy images, achieving an AUC of 0.92
- Inferred the deconvolved expression of the entire tumor genome using machine learning, yielding over 2,500 robustly predicted genes
- Analyzed multimodal data from 9,600 patients in The Cancer Genome Atlas to extract human interpretable features and biomarkers

Ashley Lab — Stanford Genomics and Precision Health

Undergraduate Researcher

Palo Alto, CA

November 2023 — Present

- Develop and train generative large language models on 380,000 DNA and protein sequence data for intelligent gene therapy design
- Fine-tune foundation models using AAV viral genome data to engineer novel sequences with high capsid fitness at 96% accuracy
- Design an in-house viral transformer foundation model trained on 150,000 genome sequences to elucidate patterns within viral DNA

Artificial Intelligence and Machine Learning Program — Food and Drug Administration

Research Fellow

Silver Spring, MD

June 2023 — September 2023

- Analyzed and simulated 6 bone microstructure metrics using a generative in silico [model](#) to better evaluate bone health for osteoporosis
- Developed a testing pipeline using Python multiprocessing, expediting bone generation and microstructure calculation by 12x
- Trained a Random Forest regressor to predict model input parameters that achieve a desired bone structure with 95.4% accuracy

Stanford University School of Engineering

Teaching Assistant

Palo Alto, CA

March 2023 — Present

- Lead weekly section of 10-15 students for CS106, Stanford's largest CS course, facilitating discussion and critical problem solving
- Solidify students' grasp on software engineering principles, providing tailored feedback through weekly assignment and exam gradings
- Clarify conceptual and technical questions for 500+ students during individualized office hours and interactive grading sessions

PatchTrackr App — Stanford Byers Center for Biodesign

Lead Software Developer

Palo Alto, CA

January 2023 — April 2023

- Led team of 8 undergrads to create a digital health iOS [app](#) for a clinical trial, contributing 15k lines of code and 36% of total commits
- Worked closely with a team of 5 Stanford doctors and CS faculty, identifying a need to increase patient access to allergy patch testing
- Engineered full stack features with Swift UI front end and Firebase back end, including photo auto-capture using Apple's ARKit API

PUBLICATIONS & PRESENTATIONS

Deep learning inference of cell type-specific gene expression from breast tumor histopathology. *Andrew Wang, Saugato Dhruba, Kun Wang, Emma Campagnolo, Eldad Shulman, Eytan Rupp.* [bioRxiv](#), 2025.

AI-Driven Spatial Transcriptomics Unlocks Large-Scale Breast Cancer Biomarker Discovery from Histopathology. *Eldad Shulman et al. (including Andrew Wang).* [Manuscript](#) under review at *Cell*.

Mixed-Layered Glycodendrimer Probe for Imaging Inflammation at Surgical Site Infections. *Anubhav Dhull, Ki Wan Park, Aqib Iqbal Dar, Andrew Wang, Anu Rani, Rishi Sharma, Tulio Valdez, Anjali Sharma.* [ACS Sensors](#), February 2025.

An In Silico Generative Trabecular Bone Model for Radiomic Analysis of Bone Health. *Qian Cao, Gengxin Shi, Andrew Wang, Sriharsha Marupudi, Ravi Samala, Wojciech Zbijewski, Nicholas Petrick.* Oral Presentation, [SPIE Medical Imaging](#), February 2024.

AWARDS

- **SPARK Scholar** – Stanford project accepted to a translational research program that provides industry mentorship & \$50k of funding
- Terry Winograd Prize for **Best Paper** in Ethics and Technology – selected out of 300+ entries
- **Best Pitch** at the Byers Center for Biodesign: Building for Digital Health 2023 Cohort Final Presentations for the app PatchTrackr