

Kaien Yang

Annandale, VA

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Stanford CS MS student and AI researcher with a strong background in engineering and machine learning. Two publications at NeurIPS 2023.

EDUCATION

Stanford University

B.S. Mathematics, M.S. Computer Science, GPA: 3.93/4.00

Stanford, CA

Sep 2021 – Dec 2025

CS and AI: Self-Improving AI Agents* (TA), Deep Reinforcement Learning*, Machine Learning*, Natural Language Processing*, Computer Vision*, Data Mining and Analysis*, Algorithm Design, Parallel Computing, Operating Systems

Math and Stats: Probability Theory, Linear Algebra, Time Series Analysis*, Statistical Inference*, Statistical Learning*, Linear Models*, Stochastic Processes

(* denotes graduate-level)

EXPERIENCE

Citadel, LLC

Quantitative Research Intern

New York City, NY

Jun 2025 – Aug 2025

- Global Fixed Income, Emerging Markets

Google

Research Intern

Sunnyvale, CA

Jan 2025 – Apr 2025

- Developed machine learning algorithms to discover efficient, scalable arithmetic circuits in TPUs to accelerate Gemini model inference, as a part of part of Google DeepMind and Chip Innovation teams
- Showcased results to Jeff Dean (Google Chief Scientist); received full-time offer to join immediately upon graduation

The D.E. Shaw Group

Proprietary Trading Intern

New York City, NY

Jun 2024 – Aug 2024

- Quantified relative over- and under-valuation of global equity markets as a part of Macro equities team
- Leveraged both traditional statistical techniques, as well as language model embeddings, to drive analysis

Skydio

Autonomy Engineering Intern

San Mateo, CA

Jun 2023 – Sep 2023

- Engineered computer vision algorithms for semantic scene understanding in autonomous drones

AlphaDrive

Co-founder, Developer

Stanford, CA

Mar 2023 – Mar 2024

- Developed data-driven models for golf decision-making with Stanford Varsity Golf Team coach and players
- Sole engineer of 1.5k+ LoC codebase to model shot distributions and generate real-time recommendations

Stanford IRIS Lab

Machine Learning Researcher

Stanford, CA

Mar 2022 – Sep 2023

- Designed a novel permutation-equivariant neural network architecture
- Two second-author publications at NeurIPS 2023

Research Science Institute

Research Scholar

Boston, MA (Remote)

Jun 2020 – Sep 2020

- Applied statistical mechanics to develop a diffusion model and predict the entropy of supercooled liquids
- Top 80 students selected internationally to attend program

PUBLICATIONS & RESEARCH

Permutation Equivariant Neural Functionals (PDF)

Allan Zhou, **Kaien Yang**, Kaylee Burns, Yiding Jiang, Samuel Sokota, J. Zico Kolter, Chelsea Finn

arXiv preprint arXiv:2302.14040. 2023

Neural Functional Transformers (PDF)

Allan Zhou, **Kaien Yang**, Yiding Jiang, Kaylee Burns, Winnie Xu, Samuel Sokota, J. Zico Kolter, Chelsea Finn

arXiv preprint arXiv:2305.13546. 2023

Evaluating Neural Network Pruning Techniques on Vision Transformers (PDF)

Sarah Chen*, Victor Kolev*, **Kaien Yang***, Jonathan Frankle

AWARDS

- Best Paper Award in Stanford Machine Learning
- NYC Hackathon First Place Prize (\$10,000)
- Best Hardware Hack at Stanford Treehacks (\$2,000)
- Best Chat App at Stanford Treehacks (\$2,000)
- Davidson Fellow Scholar (\$10,000)
- Marconi/Samueli Award for Innovation (\$10,000)

SKILLS

Programming Languages: Python (proficient), C++

Frameworks: PyTorch, Jax, NumPy, Pandas, Scikit-learn

Tools: Linux, Git