# Annie S. Chen

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https://anniesch.github.io/

## EDUCATION

**Stanford University (Stanford, CA)** *Sept. 2021 – Present*
- Ph.D. in Computer Science
- Advisor: Chelsea Finn

**Stanford University (Stanford, CA)** *Sept. 2017 – June 2021*
- B.S. in Mathematics, with Distinction
- M.S. in Computer Science, Artificial Intelligence Specialization (GPA: 4.02)

## PUBLICATIONS (* = equal contribution)

**Annie S. Chen,** Suraj Nair, Chelsea Finn. "Learning Generalizable Robotic Reward Functions from 'In-The-Wild' Human Videos." *Robotics: Science and Systems (RSS) 2021.*

Evan Z. Liu*, Behzad Haghgoo*, **Annie S. Chen***, Aditi Raghunathan, Pang Wei Koh, Shiori Sagawa, Percy Liang, Chelsea Finn. "Just Train Twice: Improving Group Robustness without Training Group Information." *International Conference on Machine Learning (ICML) 2021, Long oral.*

**Annie S. Chen*,** Hyunji Nam*, Suraj Nair*, Chelsea Finn. "Batch Exploration with Examples for Scalable Robotic Reinforcement Learning." *International Conference on Robotics and Automation (ICRA) 2021.*

Bryce Cai, **Annie S. Chen,** Ben Heller, Eyob Tsegaye. (2019). "Limit Theorems for Descents in Permutations and Arithmetic Progressions in Z/pZ." *Outstanding Poster Presentation*, Joint Mathematics Meetings Undergraduate Poster Session, 2019.

**Annie S. Chen**, T. Alden Gassert, Katherine E. Stange (2017). "Index Divisibility in Dynamical Sequences and Cyclic Orbits Modulo p." *New York Journal of Mathematics* 23, 1045-1063.

## RESEARCH EXPERIENCE

**CS Researcher, Stanford Artificial Intelligence Laboratory (SAIL)** *Sept. 2019 – Present*
- Advised by Prof. Chelsea Finn
- Working on robot learning, reinforcement learning, and robustness in machine learning

**Research Intern/Student Researcher, Google, Inc.** *June 2021 – Sept. 2021*
- Brain Robotics team, mentored by Pete Florence & Andy Zeng
- Working on improving action-conditioned visual dynamics models

**CS Research Assistant, Stanford AI for Human Impact Lab** *Sept. 2018 – April 2019*
- Mentored by Prof. Emma Brunskill
- Studied the impact of shared learning autonomy systems in practice

**Math Researcher, Stanford Undergrad Research Institute in Math (SURIM)** *June 2018 – Aug. 2018*
- Mentored by PhD student Felipe Hernandez, on a team of four undergraduate students
- Improved bounds on the rate of convergence of various random variables locally to a Gaussian distribution

## INVOLVEMENT

**Board Member, Stanford Women in Computer Science (WiCS)** *Oct. 2017 – May 2020*

- Co-led outreach workshops introducing coding to middle school girls

**Teaching Assistant, Euler Circle** *Sept. 2018 – Dec. 2019*

- Taught advanced proof techniques and various topics, such as number theory, combinatorics, and analysis, to advanced middle and high school Bay Area students

**Peer Advisor, Stanford University Mathematics Department** *Sept. 2019 – June 2021*

- Held weekly office hours to advise math majors & organized quarterly events

**Co-Organizer, Stanford CS Undergraduate Mentoring Program** *Oct. 2021 – Present*

- Match undergraduate students with graduate student mentors, aimed at increasing the participation of underrepresented minorities in CS

## SELECTED COURSEWORK

**Computer Science**: Machine Learning, Principles of Artificial Intelligence, Design and Analysis of Algorithms, Decision Making Under Uncertainty, Natural Language Processing with Deep Learning, Intro to Automata and Complexity Theory, Computational Complexity, Convolutional Neural Networks for Image Recognition, Computer Organization, Principles of Computer Systems, Parallel Computing
**Mathematics**: Honors Math Core (Linear Algebra, Analysis, ODE Theory), Stochastic Processes, Abstract Algebra, Combinatorics, Probability Theory, Discrete Probabilistic Methods, Partial Differential Equations, Number Theory, Lebesgue Integration and Fourier Analysis

## AWARDS

NSF Graduate Research Fellowship (2021-2024)
Stanford Mathematics Distinguished Service Award (June 2021)
University Distinction, top 15% graduating class, Stanford University (June 2021)
Honorable Mention, Computing Research Association (CRA) Undergraduate Researcher Award (Dec. 2020)
Outstanding Poster Presentation, Joint Mathematics Meetings Undergraduate Poster Session (Jan. 2019)
J. Perry Bartlett STEM Scholarship (2017-2021)

## MISC.

**Reviewing** IEEE International Conference on Robotics and Automation (ICRA)