Allison Chen

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EDUCATION

Princeton University

SEP 2022-Present

Ph.D. Candidate, Computer Science

GPA: 4.0/4.0

Advisor: Dr. Olga Russakovsky

University of California, Los Angeles

SEP 2018-JUN 2022

Summa Cum Laude

GPA: 3.993/4.0

B.S. in Computer Science | Minor in Cognitive Science

CONFERENCE PUBLICATIONS

Allison Chen, Sunnie S. Y. Kim, Amaya Dharmasiri, Olga Russakovsky, Judith E. Fan. "Portraying Large Language Models as Machines, Tools, Or Companions Affects What Mental Capacities Humans Attribute to Them".

Extended Abstracts of CHI Conference on Human Factors in Computing Systems (CHI 'EA) 2025.

[paper] [poster]

The Annual Meeting of the Cognitive Science Society (CogSci) 2025. [paper] [OSF repo]

Allison Chen, Ilia Sucholutsky, Olga Russakovsky, Thomas L. Griffiths. "Analyzing the Roles of Language and Vision in Learning from Limited Data". The Annual Meeting of the Cognitive Science Society (CogSci) 2024. [paper] [poster]

Tian Yu Liu*, Parth Agrawal*, Allison Chen*, Byung-Woo Hong, Alex Wong. "Monitored Distillation for Positive Congruent Depth Completion". European Conference for Computer Vision (ECCV), pp. 35-53, 2022. * = equal contribution [code] [paper]

Alex Wong*, Allison Chen*, Yangchao Wu, Safa Cicek, Alexandre Tiard, Byung-Woo Hong, and Stefano Soatto. "Small Lesion Segmentation in Brain MRIs with Subpixel Embedding". MICCAI Brain Lesion Workshop, pp. 75-87, 2021. Oral Presentation. * = equal contribution [code] [paper]

WORK EXPERIENCE

Graduate Research Assistant

JUN 2024-Present

Princeton University | Visual AI Lab

• Lead independent and collaborative research projects with external collaborators in human-AI interaction.

Teaching Assistant

JAN 2024-MAY 2024

Princeton University | Art and Robotics Independent Work

- Advised 10+ undergraduate students in independent projects combining art with programmable Arduinos.
- Developed Arduino tutorial materials organized public-facing exhibition attracting over 40 local students.

Head Teaching Assistant

SEP 2023-DEC 2023

Princeton University | *Introduction to Machine Learning*

Managed classroom, assignment, and exam logistics. Developed assignments and teaching materials.

• Led weekly discussion section for 30+ students and organized exam review sessions.

Software Engineering Intern

JUN 2021-SEP 2021

Microsoft | Azure Communication Services

• Implemented device & network tests in **Typescript** to predict audio and video calling capabilities.

Software Engineering Intern

JUN 2020-SEP 2020

Oracle Corporation | *Performance, Scalability, and Reliability Team*

• Developed **Node.js** framework in **Typescript** to aid internal teams with developing unified functional and performance tests on user interfaces.

Machine Learning Application Intern

JUN 2019-AUG 2019

The Field Museum - Chicago, IL | Botany Research Team w/ Dr. Matt von Konrat

• Developed deep learning models in **TensorFlow** and **Keras** to classify botanical specimen image

HONORS & AWARDS

Fellowships/Scholarships

•	2024-	NSF Graduate Research Fellowship

- 2022-23 Intel Graduate Diversity Scholarship
- 2021-22 APLUS Scholarship
- 2021-22 Tau Beta Pi Forge No. 111 Scholarship
- 2021-22 Society of Women Engineers Los Angeles Scholarship
- 2020-21 Cornelius Leondes UCLA Undergraduate Scholarship
- 2020-21 National Society of Women Engineers Intel Undergraduate Scholarship
- 2020-21 Society of Women Engineers Los Angeles Scholarship
- 2020-21 Society of Women Engineers at UCLA Scholarship
- 2020-21 UCLA Faculty Women's Club Scholarship
- 2018-19 UCLA Women in Engineering Scholarship

Society Involvement

•	2025	Natural and Artificial Minds	Initiative, Graduate Fellow
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- 2018-24 Society of Women Engineers
- 2021-22 Google Computer Science Research Mentorship Program
- 2020-22 Upsilon Pi Epsilon Computer Science Honors Society
- 2019-22 Tau Beta Pi Engineering Honors Society

Achievements & Recognition

•	2022	UCLA Engineering Achievement Award in Student Welfa	are

- 2022 <u>Engineering For Humanity Research Symposium Director</u>
- 2018-22 UCLA Dean's Honors List
- 2018 1st Place at UCLA Idea Hacks Hardware Hackathon

RESEARCH PROJECTS

Effect of Portraying Language Models on People's Trust Behaviors

IUN 2025-Present

 Explore how portrayals of language models can influence how people trust their responses in difficult information seeking tasks.

Effect of Portraying Language Models on People's Beliefs and Attitudes

JUN 2024-Present

Dr. Olga Russakovsky, Dr. Judith E. Fan (Stanford) | Princeton VisualAI Lab

• Study the effects of how various messaging and portrayals around large language models affects the general public's beliefs and attitudes towards the technology.

Large Scale Less-Than-One-Shot Learning Using Language

MAY 2024-Present

Dr. Olga Russakovsky, Dr. Ilia Sucholutsky, Dr. Tom Griffiths | Princeton VisualAI Lab

• Develop method of leveraging language to teach a model image classification with more classes than training images.

Role of Language in Vision-Language Learning

SEP 2023-MAY 2024

Dr. Olga Russakovsky, Dr. Tom Griffiths | Princeton VisualAI Lab

 Analyzed the contribution of language to Vision-Language model performance by hypothesizing a cognitive architecture of the models and ablating various components.

Monitored Distillation OCT 2021-JUN 2022

Dr. Stefano Soatto | UCLA Vision Lab

- Built an ensemble of teachers by computing a criterion based on reprojection error to train a lightweight student model in unsupervised sparse to dense depth completion.
- Addressed weaknesses of each teacher model and ensemble holistically by balancing distilled loss with typical unsupervised color and structural reprojection losses using similar criteria.

Small Lesion Segmentation

MAR 2020-OCT 2021

Dr. Stefano Soatto | UCLA Vision Lab

- Proposed a technique using subpixel methods to retain details of a brain MRI scan that are often lost through rapid spatial downsampling and max-pooling in medical image segmentation works.
- Devised method that outperforms the state of the art while reducing memory requirements by 72.3% and 57.5% for training and testing respectively.

Monotonicity Verification Extension

APR 2021-JUN 2021

Dr. Guy Van den Broeck | Statistical and Relational Artificial Intelligence Lab (StarAI)

- Extended monotonicity verification system for small fully connected networks to actor-critic based models.
- Developed Python scripts to convert between checkpoint save formats between TFLearn and Keras APIs
 for TensorFlow to extend generalizability.

LEADERSHIP & OUTREACH

Mentorship

• Mentor for Undergraduate Researchers (1 mentee)

JUN 2025-Present

• Mentor for First Year Grad Students (2 mentees)

SEP 2023-Present

• Mentor for High School Research Interns (2 mentees)

JUN 2023-AUG 2023

• Mentor for Society of Women Engineers @ UCLA Undergrad (1 mentee)

OCT 2024-Present

• UCLA Alumni Mentor (3 mentees)

SEP 2022-Present

Climate & Inclusion Committee Member, Visual AI Lab, Princeton University

•	Facilitate cross-disciplinary	connections for rese	archers studying intelligence	JAN 2025-MAY 2025
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Prison Teaching Initiative, Princeton University

Math and science tutor for incarcerated students	JAN 2023-MAY 2023
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Aquinas Institute Bible Study Leader, Princeton University

• Organize and host weekly Bible studies for graduate students SEP 2024-MAY 2025

Graduate Society of Women Engineers, Princeton University

• Chapter co-founder at Princeton University OCT 2022-MAY	2024
• Chapter co-founder at Princeton University OCT 2022-MAY	202

Princeton Computer Science Pre-Application Mentor NOV 2022

Society of Women Engineers, UCLA

•	Internal Vice President and Executive Board Member	APR 2021-JUN 2022
•	Evening with Industry External Director and Executive Board Member	APR 2020-APR 2021
•	SWE Families Head	OCT 2020-JUN 2021
•	Student Relations Director and Executive Board Member	APR 2019-APR 2020

Grad2Mentor Program, UCLA

Co-founded high school mentorship program for underrepresented students in CS
 APR 2021-SEP 2021

SKILLS

- Languages: Python, R, C++/C, Typescript/Javascript, Java, HTML/CSS
- Frameworks/Packages: Pytorch, Tensorflow, Keras, Numpy, React
- Large-scale Surveys: Qualtrics, Prolific, Pre-Registrations
- Technologies: Unix, Git, Latex
- Hobbies: Spikeball, dance, cooking, and reading! Currently reading: Code Girls by Liza Mundy