### Sunnie S. Y. Kim

#### **EMPLOYMENT**

Incoming **Apple** 

Research Scientist in the Human-Centered Machine Intelligence & Responsible AI Group

2023 **Microsoft Research** 

Research Intern in the FATE (Fairness, Accountability, Transparency & Ethics in AI) Group

#### **EDUCATION**

2020–2025 Princeton University

PhD in Computer Science

Dissertation: Advancing Responsible AI with Human-Centered Evaluation Committee: Olga Russakovsky (adviser), Andrés Monroy-Hernández Jennnifer Wortman Vaughan, Q. Vera Liao, Parastoo Abtahi

Toyota Technological Institute at Chicago 2019-2020

Visiting Student advised by Greg Shakhnarovich

2014–2018 Yale University

Bachelor of Science in Statistics and Data Science

GPA 3.91/4.00, magna cum laude, Distinction in the major Recognition for outstanding dedication to the department

Senior thesis advised by John Lafferty

#### HONORS, AWARDS & FELLOWSHIPS

2025	FAccT 2025 Doctoral Consortium
2025	CHI 2025 Honorable Mention Award 🏅
2025	CHI 2025 Special Recognition for Outstanding Review (2 for Papers, 1 for LBW)
2024	Georgia Tech Doctoral Consortium on Responsible Computing, AI, and Society
2024	MIT Rising Stars in EECS Recognition 🜟
2024	Siebel Scholars Award (\$35,000) 🜟
2024	CHI 2024 Doctoral Consortium
2024	Princeton SEAS Travel Grant Award
2023	CHI 2023 Honorable Mention Award 🏅
2023	SIGCHI Gary Marsden Travel Award
2022-2025	NSF Graduate Research Fellowship (\$138,000) 🜟
2022-2023	ML Reproducibility Challenge Outstanding Reviewer Award ( $\times 2$ )
2020-2023	Women in Computer Vision Workshop Travel and Registration Award
2018	Yale Adrian Van Sinderen Book Collecting First Prize (\$1,000)
2016	Yale Summer Research Fellowship
2014-2018	Korea Presidential Science Scholarship (\$200,000) 🚖

#### **PAPERS**

#### Conference and Journal Publications (Peer-Reviewed)

2025 Fostering Appropriate Reliance on Large Language Models: The Role of Explanations, Sources, and Inconsistencies

Sunnie S. Y. Kim, Jennifer Wortman Vaughan, Q. Vera Liao, Tania Lombrozo, Olga Russakovsky ACM Conference on Human Factors in Computing Systems (CHI) Honorable Mention Award (Featured in Microsoft's New Future of Work Report)

2024 "I'm Not Sure, But...": Examining the Impact of Large Language Models' Uncertainty Expression on User Reliance and Trust

<u>Sunnie S. Y. Kim</u>, Q. Vera Liao, Mihaela Vorvoreanu, Stephanie Ballard, Jennifer Wortman Vaughan *ACM Conference on Fairness, Accountability, and Transparency (FAccT)* 

(Featured in Axios, New Scientist, ACM showcase, Microsoft's New Future of Work Report, and the Human-Centered AI Medium publication as "Good Reads in Human-Centered AI")

2023 "Help Me Help the AI": Understanding How Explainability Can Support Human-AI Interaction

Sunnie S. Y. Kim, Elizabeth Anne Watkins, Olga Russakovsky, Ruth Fong, Andrés Monroy-Hernández

ACM Conference on Human Factors in Computing Systems (CHI) Honorable Mention Award (One of the top 10 cited CHI papers in 2023–2024 (as of Dec 2024); Featured in the Human-Centered AI Medium publication as "CHI 2023 Editors' Choice; Invited for talks at multiple AI and HCI conference workshops)

Humans, AI, and Context: Understanding End-Users' Trust in a Real-World Computer Vision Application

<u>Sunnie S. Y. Kim</u>, Elizabeth Anne Watkins, Olga Russakovsky, Ruth Fong, Andrés Monroy-Hernández

ACM Conference on Fairness, Accountability, and Transparency (FAccT)

Overlooked Factors in Concept-based Explanations: Dataset Choice, Concept Learnability, and Human Capability

Vikram V. Ramaswamy, <u>Sunnie S. Y. Kim</u>, Ruth Fong, Olga Russakovsky *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)* 

2022 HIVE: Evaluating the Human Interpretability of Visual Explanations

<u>Sunnie S. Y. Kim</u>, Nicole Meister, Vikram V. Ramaswamy, Ruth Fong, Olga Russakovsky *European Conference on Computer Vision (ECCV)* 

(Selected as spotlight and invited for talks at multiple AI and HCI conference workshops)

Shallow Neural Networks Trained to Detect Collisions Recover Features of Visual Loom-Selective Neurons

Baohua Zhou, Zifan Li, <u>Sunnie S. Y. Kim</u>, John Lafferty, Damon A. Clark *eLife* (Journal for the biomedical and life sciences)

2021 [Re] Don't Judge an Object by Its Context: Learning to Overcome Contextual Bias Sunnie S. Y. Kim, Sharon Zhang, Nicole Meister, Olga Russakovsky

**ReScience** C (Journal for reproducible replications in computational science)

Fair Attribute Classification through Latent Space De-biasing

Vikram V. Ramaswamy, Sunnie S. Y. Kim, Olga Russakovsky

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)

(Featured in Coursera's GANs Specialization course and the MIT Press Book Foundations of Computer Vision; Invited for talks at multiple AI conference workshops)

Information-Theoretic Segmentation by Inpainting Error Maximization

Pedro Savarese, <u>Sunnie S. Y. Kim</u>, Michael Maire, Gregory Shakhnarovich, David McAllester *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)* 

#### 2020 Deformable Style Transfer

Sunnie S. Y. Kim, Nicholas Kolkin, Jason Salavon, Gregory Shakhnarovich European Conference on Computer Vision (ECCV)

## Which Grades Are Better, A's and C's, or all B's? Effects of Variability in Grades on Mock College Admission Decisions

Woo-kyoung Ahn, Sunnie S. Y. Kim, Kristen Kim, Peter K. McNally

Judgment and Decision Making (Journal for the psychology of human judgment and decision making)

#### Workshop Papers and Extended Abstracts (Lightly Peer-Reviewed)

\* indicates equal contribution

## 2025 Portraying Large Language Models as Machines, Tools, or Companions Affects What Mental Capacities Humans Attribute to Them

Allison Chen, <u>Sunnie S. Y. Kim</u>, Amaya Dharmasiri, Olga Russakovsky, Judith E. Fan *CHI Extended Abstracts (Late Breaking Work)* 

## Interactivity x Explainability: Toward Understanding How Interactivity Can Improve Computer Vision Explanations

Indu Panigrahi, <u>Sunnie S. Y. Kim</u>\*, Amna Liaqat\*, Rohan Jinturkar, Olga Russakovsky, Ruth Fong, Parastoo Abtahi

**CHI** Extended Abstracts (Late Breaking Work)

### 2024 Establishing Appropriate Trust in AI through Transparency and Explainability

Sunnie S. Y. Kim

CHI Extended Abstracts (Doctoral Consortium)

## Human-Centered Explainable AI (HCXAI): Reloading Explainability in the Era of Large Language Models (LLMs)

Upol Ehsan, Elizabeth Anne Watkins, Philipp Wintersberger, Carina Manger, <u>Sunnie S. Y. Kim</u>, Niels van Berkel, Andreas Riener, Mark O. Riedl

**CHI** Extended Abstracts (Workshop Proposal)

# Allowing Humans to Interactively Guide Machines Where to Look Does Not Always Improve Human-AI Team's Classification Accuracy

Giang Nguyen, Mohammad Reza Taesiri, Sunnie S. Y. Kim, Anh Nguyen

CVPR Workshop on Explainable AI for Computer Vision

#### 2023 Explainable AI for End-Users

<u>Sunnie S. Y. Kim</u>, Elizabeth Anne Watkins, Olga Russakovsky, Ruth Fong, Andrés Monroy-Hernández

CHI Workshop on Human-Centered Explainable AI

### 2022 Closing the Creator-Consumer Gap in XAI: A Call for Participatory XAI Design with End-users

Sunnie S. Y. Kim, Elizabeth Anne Watkins, Olga Russakovsky, Ruth Fong, Andrés Monroy-Hernández

NeurIPS Workshop on Human-Centered AI

### **ELUDE:** Generating Interpretable Explanations via a Decomposition into Labelled and Unlabelled Features

Vikram V. Ramaswamy, <u>Sunnie S. Y. Kim</u>, Nicole Meister, Ruth Fong, Olga Russakovsky **CVPR** Workshop on Explainable AI for Computer Vision

#### 2021 Cleaning and Structuring the Label Space of the iMet Collection 2020

Vivien Nguyen\*, Sunnie S. Y. Kim\*

CVPR Workshop on Fine-Grained Visual Categorization

#### **Technical Report (Not Peer-Reviewed)**

2018 Environmental Performance Index

Zachary A. Wendling, John W. Emerson, Daniel Esty, Marc Levy, Alex de Sherbinin, ..., Sunnie S. Y. Kim, et al.

**World Economic Forum** (Environmental Performance Index is a large-scale evaluation of 180 countries' environmental health and ecosystem vitality. As the data team lead, I built the full data pipeline and led the analysis work. The results were presented at the World Economic Forum and covered by international media outlets.)

#### **EXPERIENCE**

2020-2025	Princeton Visual AI Lab PhD Student advised by Olga Russakovsky (Adviser)
2022-2025	Princeton HCI Lab PhD Student advised by Andrés Monroy-Hernández (Committee member)
2023	Microsoft Research FATE (Fairness, Accountability, Transparency, & Ethics in AI) Group Research Intern advised by Jennifer Wortman Vaughan and Q. Vera Liao
2019-2020	TTIC Perception and Learning Systems Lab Visiting Student advised by Greg Shakhnarovich
2018-2019	Yale Machine Learning and Neural Computation Group Research Intern advised by John Lafferty
2017-2018	Yale Center for Environmental Law and Policy Data Team Lead for Environmental Performance Index supervised by Jay Emerson
2017	Fathom Information Design Data Analyst Intern supervised by Ben Fry
2016	Yale Thinking Lab Research Intern advised by Woo-kyoung Ahn

#### **TALKS**

2025 Yonsei CSI 7110 Topics in Responsible AI Course
Princeton COS 598B Machine Behavior Course
Apple Human-Centered Machine Intelligence & Responsible AI Group
Cornell Information Science Colloquium
Johns Hopkins Computer Science Seminar
Boston University Computing & Data Sciences Colloquium
SNU AI Computing Winter School

2024 Cornell Tech Social Technologies Lab
ECCV 2024 Workshop on Explainable Computer Vision
Princeton Concepts & Cognition Lab

MILA Human-Centered AI Reading Group IBS Data Science Group

KAIST Kim Jaechul Graduate School of AI

	NYC Computer Vision Day
2023	Explainable AI Talk Series
	CHI 2023 Workshop on Human-Centered Explainable AI
2022	NeurIPS 2022 Workshop on Human-Centered AI
	CVPR 2022 Workshop on Explainable AI for Computer Vision
2021	CVPR 2021 Workshop on Responsible Computer Vision
	CVPR 2021 Workshop for Women in Computer Vision
2020	Princeton Course COS 429 Computer Vision Course
	Princeton PIXL Talk Series
	Princeton Bias in AI Reading Group

#### **SERVICE**

#### Organizing (Conferences, Workshops, and Other Events)

2025	FAccT 2025 (Proceedings Co-Chair)
	CVPR 2025 Workshop on Explainable AI for Computer Vision (Co-Organizer)
	NYC Computer Vision Day 2025 (Program Committee)
2024	CVPR 2024 Workshop on Explainable AI for Computer Vision (Co-Organizer)
	CHI 2024 Workshop on Human-Centered Explainable AI (Co-Organizer)
2023	CVPR 2023 Workshop on Explainable AI for Computer Vision (Co-Organizer)
	CVPR 2023 Workshop for Women in Computer Vision (Co-Organizer)
2018	NESS NextGen Data Science Day 2018 (Local Organizing Committee)

#### Committee

2021	Princeton Computer Science Graduate Admissions Committee
2017-2019	Yale Statistics & Data Science Departmental Student Advisory Committee

#### **Community Building**

2022-2023	Explainable AI Slack and Twitter Community (Co-Organizer)
2017-2019	Yale Dimensions Organization for Women and Other Minorities in Math (Co-Founder)

#### Volunteering

ECCV (2024), FAccT (2024), CVPR (2022), ICML (2020), ICLR (2020), NeurIPS (2019–2020) NSF Safety and Trust in AI-Enabled Systems Workshop (2022) COVID Translate Project (2020)

#### **PEER REVIEW**

<sup>\*</sup> indicates special recognitions for outstanding reviews

#### Conferences

NeurIPS (2025), CVPR (2022, 2023, 2024, 2025), ICCV (2021, 2023), ECCV (2022, 2024)

CHI (2023, 2024, 2025\*\*), FAccT (2023, 2024, 2025), AIES (2024), SaTML (2023)

#### **Workshops & Extended Abstracts**

CVPR 2025 Workshop on Explainable AI for Computer Vision

CHI 2025 Late Breaking Work\*

CHI 2024 Workshop on Human-Centered Explainable AI

CVPR 2024 Workshop on Explainable AI for Computer Vision

NeurIPS 2023 Workshop on Explainable AI in Action

ICML 2023 Workshop on AI & HCI

CVPR 2023 Workshop on Explainable AI for Computer Vision

CVPR 2023 Workshop for Women in Computer Vision

AAAI 2023 Workshop on Representation Learning for Responsible Human-Centric AI

CVPR 2021 Workshop on Responsible Computer Vision

#### Challenges

ML Reproducibility Challenge (2020, 2021\*, 2022\*)

#### **Books**

Foundations of Computer Vision (Authors: Antonio Torralba, Phillip Isola, and William T. Freeman)

Handbook of Human-Centered Artificial Intelligence (Editor-in-cheif: Wei Xu)

#### **TEACHING**

2021 Princeton Computer Science 429 Computer Vision

**Graduate Teaching Assistant** 

**Princeton AI4ALL** 

Instructor

2019-2020 TTI-Chicago Girls Who Code

Co-Founder and Instructor

2018 Yale Statistics and Data Science 365/565 Data Mining and Machine Learning

Undergraduate Teaching Assistant

2017 Yale Statistics and Data Science 230/530 Data Exploration and Analysis

Undergraduate Teaching Assistant

#### **MENTORING**

#### **Research Mentoring**

2024–2025 **Allison Chen** (CS PhD student at Princeton. Recipient of the NSF Graduate Research Fellowship) *Understanding How People Attribute Mental Capacities to LLMs* (paper published in *CHI EA*)

- 2024–2025 **Indu Panigrahi** (CS Master's student at Princeton)

  Incorporating Interactivity in AI Explanations (paper published in CHI EA)
- 2022–2023 **Rohan Jinturkar** (CS undergrad at Princeton. Recipient of the Sigma Xi Book Award for Outstanding Undergraduate Research & Outstanding CS Senior Thesis Prize)

  Developing an Interactive, Dialogue-based AI Explanation System for Non-Experts (senior thesis)
- 2020–2022 Nicole Meister (ECE undergrad at Princeton, now EE PhD student at Stanford. Recipient of the NSF Graduate Research Fellowship, Calvin Dodd MacCracken Senior Thesis/Project Award & Sigma Xi Book Award for Outstanding Undergraduate Research)

  Evaluating AI Explanations & Mitigating Contextual Bias in Visual Recognition Systems (papers published in ECCV and ReScience C)
- 2020–2021 **Sharon Zhang** (Math undergrad at Princeton, now CS PhD student at Stanford. Recipient of the Sigma Xi Book Award for Outstanding Undergraduate Research)

  Mitigating Contextual Bias in Visual Recognition Systems (paper published in **ReScience C**)

#### **Non-Research Mentoring**

- 2022–2023 Princeton Computer Science G1 Mentoring Program
- 2021–2022 Princeton Computer Science Graduate Applicant Support Program