

Tricia J. Ngoon

Email: tngoon@andrew.cmu.edu

Website: tngoon.github.io

EDUCATION	Ph.D. in Cognitive Science University of California, San Diego	2015 – 2021
	M.S. in Cognitive Science University of California, San Diego	2015 – 2018
	B.A. in Psychology with Honors University of California, Berkeley	2010 – 2013

EXPERIENCE	Postdoctoral Researcher <i>Carnegie Mellon University Human-Computer Interaction Institute</i>	2021 –
	Affiliated Ph.D Student Researcher <i>Early Learning & Cognition Lab at UC San Diego</i>	2017 – 2021
	Ph.D Student Researcher <i>The Design Lab at UC San Diego</i>	2015 – 2021
	Creative Technologies Lab Intern <i>Adobe Research</i>	Summer 2020
	Creative Intelligence Lab Intern <i>Adobe Research</i>	Summer 2019
	User Experience Research Intern <i>NASA Jet Propulsion Laboratory</i>	Summer 2016
	Research Assistant <i>Stanford Cognitive & Systems Neuroscience Lab</i>	2013 – 2015
	Undergraduate Research Assistant <i>UC Berkeley Helen Wills Neuroscience Institute</i>	2012 – 2013
	Undergraduate Research Assistant <i>UC Berkeley Human Neuropsychology Lab</i>	2011 – 2013

PUBLICATIONS

Conference & Journal Papers

Tricia J. Ngoon, David Kovalev, Prasoon Patidar, Chris Harrison, Yuvraj Agarwal, John Zimmerman, & Amy Ogan. 2023. "An instructor is [already] able to keep track of 30 students": Students' Perceptions of Smart Classrooms for Improving Teaching & Their Emergent Beliefs about Teaching and Learning. Conditionally accepted to the *ACM Conference on Designing Interactive Systems (DIS) 2023*.

Vikram Cannanure, Eloisa Avila, **Tricia J. Ngoon**, Yves Adjii, Sharon Wolf, Kaja Jasinska, Tim Brown, & Amy Ogan. 2022. "We dream of climbing the ladder, for getting there, we have to do our job better": Designing for Teacher Aspirations in Rural Côte d'Ivoire. To appear in *ACM Conference on Computing Systems & Sustainable Societies (COMPASS) Proceedings*.

Tricia J. Ngoon. 2021. Interactive Attunement Catalyzes Creative Learning. UC San Diego PhD Dissertation.

- Tricia J. Ngoon**, Joy O. Kim, & Scott Klemmer. 2021. Shown: Adaptive Conceptual Guidance Aids Example Use in Creative Tasks. In *ACM Designing Interactive Systems (DIS) Proceedings*.
- C. Ailie Fraser, **Tricia J. Ngoon**, Mira Dontcheva, & Scott Klemmer. 2019. RePlay: Contextually Presenting Learning Videos across Software Applications. In *ACM Human Factors in Computing Systems (CHI) Proceedings*. **Honorable Mention Award (Top 5%)**
- Tricia J. Ngoon***, C. Ailie Fraser*, Ariel Weingarten, Mira Dontcheva, & Scott Klemmer. 2018. Interactive Techniques for Improving Creative Feedback. In *ACM Human Factors in Computing Systems (CHI) Proceedings*. **Honorable Mention Award (Top 5%)** (* indicates equal contribution)
- Christian Battista, Tanya M. Evans, **Tricia J. Ngoon**, Tianwen Chen, Lang Chen, John Kochalka, & Vinod Menon. 2018. Mechanisms of Interactive Specialization and Emergence of Functional Brain Circuits Supporting Cognitive Development in Children. *Nature Partner Journals Science of Learning*, 3(1).
- Tanya M. Evans, John Kochalka, **Tricia J. Ngoon**, Sarah Wu, Shaozheng Qin, Christian Battista, & Vinod Menon. 2015. Brain Structural Integrity and Intrinsic Functional Connectivity Forecasts 6-Year Longitudinal Growth in Children's Numerical Abilities. *Journal of Neuroscience*, 35(33). 11743-11750.

Graduate Symposiums

- Tricia J. Ngoon**. 2019. Overcoming Satisficing: Scaffolds for Amplifying Creativity. Graduate Student Symposium abstract in *ACM Creativity & Cognition (C&C) Proceedings*.
- Tricia J. Ngoon**. 2019. Inventive Scaffolds Catalyze Creative Learning. Doctoral Consortium abstract in *ACM Human Factors in Computing Systems (CHI) Proceedings*.

Extended Abstracts

- Tricia J. Ngoon**, Vivian Leung, Micah Goldwater, and Caren M. Walker. 2022. Exploration as a Strategy to Support Children's Pattern Learning. Poster at the *Cognitive Science Society Conference*.
- Tricia J. Ngoon**, Prasoon Patidar, Amy Ogan, Chris Harrison, Yuvraj Agarwal, & John Zimmerman. 2022. Professional Informatics: Personalized, Data-driven Professional Development. Position paper in the Personal Informatics & Artificial Intelligence Workshop at the *ACM Human Factors in Computing Systems (CHI) Conference*.
- Tricia J. Ngoon**, Vivian Y. Leung, & Caren M. Walker. 2022. How Exploration Supports Children's Pattern Learning. Poster at the *Cognitive Development Society (CDS) Conference*.
- Tricia J. Ngoon**, Caren M. Walker, & Scott Klemmer. 2019. The Dark Side of Satisficing: Setting the Temperature of Creative Thinking. In *ACM Creativity & Cognition (C&C) Proceedings*.
- Samuel Lau, **Tricia J. Ngoon**, Vineet Pandey, & Scott Klemmer. 2019. Experiment Reconstruction Reduces Fixation on Surface Details of Explanations. In *ACM Creativity & Cognition (C&C) Proceedings*.

- C. Ailie Fraser, **Tricia J. Ngoon**, Ariel Weingarten, Mira Dontcheva, & Scott Klemmer. 2017. CritiqueKit: A Mixed-Initiative, Real-Time Interface for Improving Feedback. In *ACM User Interface Software & Technology (UIST) Companion*.
- Tricia J. Ngoon**, Alexander Gamero-Garrido, & Scott Klemmer. 2016. Supporting Peer Instruction through Evidence-Based Design of Online Instructional Templates. In *ACM Learning at Scale (L@S) Proceedings*.
- Tricia J. Ngoon**, Rachel Chen, Amit Deutsch, & Sean Lip. 2016. Oppia: A Community of Peer Learners to Make Conversational Learning Experiences. In *ACM Computer-Supported Cooperative Work & Social Computing (CSCW) Companion*.

HONORS & AWARDS	National Science Foundation STEM Education Postdoctoral Research Fellowship (\$300,000)	2022 – 2024
	Selected for Rising Stars in EECS Workshop	2019
	Honorable Mention Paper Award, ACM Human Factors in Computing Systems (CHI)	2019
	Honorable Mention Paper Award, ACM Human Factors in Computing Systems (CHI)	2018
	Honorable Mention, National Science Foundation Graduate Research Fellowship	2016
	UC San Diego Competitive Edge Graduate Fellowship	2015
	UC Berkeley Regents' & Chancellor's Research Fellowship	2013
	UC Berkeley Summer Undergraduate Research Fellowship	2012
	UC Berkeley Regents' & Chancellor's Scholarship	2010 – 2013
TEACHING EXPERIENCE	UC San Diego – Instructor of Record	
	DSGN 90: Web Programming Design Seminar	
	UC San Diego – Teaching Assistant	
	DSGN 1: Design of Everyday Things	
	COGS 17: Neurobiology of Cognition	
	COGS 112: Psychology of Humor	
	COGS 120/CSE 170: Interaction Design	
INVITED TALKS	COGS 122: Interaction Design Startup Studio	
	COGS 123: Social Computing	
	Pennsylvania State University College of Information Science & Technology. State College, PA.	Feb 2023
	University of Pittsburgh Learning Research & Development Center. Pittsburgh, PA.	Apr 2022
	Carnegie Mellon University HCII Seminar. Pittsburgh, PA	Jan 2022
	University of Wisconsin, Madison HCI Seminar. Virtual.	Nov 2020
	UC San Diego Cognitive Science Students Association Speaker Series. San Diego, CA.	Feb 2020

UC Berkeley Institute of Design Seminar. Berkeley, CA.	Sept 2019
Stanford HCI Seminar. Palo Alto, CA.	Aug 2019
Cognition at the Shore Speaker Series. San Diego, CA.	Mar 2019
OMG SysML Working Group Meeting. Virtual.	Sept 2016
Harvard Undergraduate Research Conference. Cambridge, MA.	Jan 2013
UC Berkeley Summer Undergraduate Research Fellows Conference. Berkeley, CA.	Aug 2012

SERVICE & LEADERSHIP

Service

Scholarships Co-Chair, *AAAI Human Computation (HCOMP) & ACM Collective Intelligence (CI)*

Panelist, *NSF Innovative Technology Experiences for Students & Teachers (ITEST) Program*

Program Committee Member, *ACM Creativity & Cognition (C&C)*

Head Teaching Assistant, *UC San Diego Cognitive Science Department*

Student Volunteer Co-Chair, *ACM Creativity & Cognition (C&C)*

Graduate Social Events Coordinator, *UC San Diego Cognitive Science Department*

Event Coordinator, *UC San Diego Graduate Women in Computing*

Graduate Student Representative, *UC San Diego Cognitive Science Department*

External Vice-President, *UC Berkeley Regents' & Chancellor's Scholars Association*

Faculty Committee Co-Chair, *UC Berkeley Regents' & Chancellor's Scholars Association*

Reviewer

ACM Computer-Supported Cooperative Work (CSCW)

ACM Creativity & Cognition (C&C)

ACM Human Factors in Computing Systems (CHI)

ACM Designing Interactive Systems (DIS)

ACM Ubiquitous Computing (IMWUT)

American Education Research Association (AERA)

Artificial Intelligence & Education (AIED)

Cognitive Science Society Conference

International Society for Learning Sciences (ISLS)

Mentorship

Prasoon Pratidar, *PhD Student*

Vikram Cannanure, *PhD Student*

Prithika Acharya, *Master's Student*

Aastha Patel, *Master's Student*

Jinfan (Sara) Bai, *Master's Student*

Yu (Lucia) Fang, *Undergraduate Research Assistant*

Longjie Guo, *Undergraduate Research Assistant*

David Kovalev, *Undergraduate Research Assistant*

Lujia (Lesley) Yan, *Undergraduate Research Assistant*
Ayush Tripathi, *Undergraduate Research Assistant*
Adriana Poznanski, *Undergraduate Research Assistant*
Haley Litt, *Undergraduate Research Assistant*
Banso Nguyen, *Undergraduate Research Assistant*
Vivian Leung, *Undergraduate Research Assistant*
Michelle Lee, *Research Assistant*
Nicolas La Polla, *Undergraduate Research Assistant*
Jasper Travers, *Undergraduate Research Assistant*
