

# Tricia J. Ngoon

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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

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RESEARCH EXPERIENCE	Postdoctoral Researcher <i>Carnegie Mellon University Human-Computer Interaction Institute</i>	2021 –
	Affiliated Ph.D Student Researcher <i>Early Learning &amp; 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 &amp; 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

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## PUBLICATIONS

### Conference & Journal Papers

- 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. Shöwn: 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*.

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

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**SERVICE &  
LEADERSHIP**

**Service**

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 Ubiquitous Computing (IMWUT)  
ACM Creativity & Cognition (C&C)  
ACM Computer-Supported Cooperative Work (CSCW)  
ACM Human Factors in Computing Systems (CHI)  
ACM Designing Interactive Systems (DIS)  
Cognitive Science Society Conference  
International Society for Learning Sciences (ISLS)  
American Education Research Association (AERA)  
Artificial Intelligence & Education (AIED)

**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*  
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*

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