# Tricia J. Ngoon

Website: tngoon.github.io **EDUCATION Ph.D. in Cognitive Science** 2015 - 2021 **University of California, San Diego** Advisor: Dr. Scott Klemmer M.S. in Cognitive Science 2015 - 2018 **University of California, San Diego** Advisor: Dr. Scott Klemmer 2010 - 2013 **B.A.** in Psychology with Honors **University of California, Berkeley** Honors Thesis Advisor: Dr. Art P. Shimamura Affiliated Ph.D Student Researcher RESEARCH 2017 -Early Learning & Cognition Lab at UC San Diego **EXPERIENCE Ph.D Student Researcher** 2015 -The Design Lab at UC San Diego **Creative Technologies Lab Intern** Summer Adobe Research 2020 **Creative Intelligence Lab Intern** Summer Adobe Research 2019 **User Experience Research Intern** Summer 2016 NASA Jet Propulsion Laboratory **Research Assistant** 2013 - 2015 Stanford Cognitive & Systems Neuroscience Lab **Undergraduate Research Assistant** 2012 - 2013 UC Berkeley Helen Wills Neuroscience Institute 2011 - 2013 **Undergraduate Research Assistant** UC Berkeley Human Neuropsychology Lab

Email: tngoon@ucsd.edu

### **PUBLICATIONS**

## **Conference & Journal Papers**

**Tricia J. Ngoon**, Joy O. Kim, & Scott Klemmer. Thinking with Boxes. Tools for Abstraction Enable Flexible Creative Work. Under review.

Vineet Pandey, **Tricia J. Ngoon**, & Samuel Lau. Constructive Activities for Supporting People's Creative Scientific Insights. Under review.

**Tricia J. Ngoon**, Joy O. Kim, & Scott Klemmer. Shöwn: Adaptive Conceptual Guidance Aids Example Use in Creative Tasks. To appear 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**, Joy O. Kim, Caren M. Walker, & Scott Klemmer. 2020. Amplifying Exploratory Thinking through Creativity Support Tools. In ACM Human Factors in Computing Systems (CHI) "Where Art Meets Technology" Workshop.
- **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	Selected for Rising Stars in EECS Workshop	201
	Honorable Mention Paper Award, ACM Human Factors in	201
	Computing Systems (CHI)  Honorable Mention Paper Award, ACM Human Factors in	201
	Computing Systems (CHI)	201
	Honorable Mention, National Science Foundation Graduate Research Fellowship	2015 - 201
	UC San Diego Competitive Edge Graduate Fellowship	201
	UC Berkeley Regents' & Chancellor's Research Fellowship	201
	UC Berkeley Summer Undergraduate Research Fellowship	201
	UC Berkeley Regents' & Chancellor's Scholarship	2010 - 201
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	
	COGS 122: Interaction Design Startup Studio	
	COGS 123: Social Computing	
INVITED TALKS	University of Wisconsin, Madison HCI Seminar. Virtual.	Nov 202
	UC San Diego Cognitive Science Students Association Speaker Series. San Diego, CA.	Feb 202
	Berkeley Institute of Design Seminar. Berkeley, CA.	Sept 201
	Stanford HCI Seminar. Palo Alto, CA.	Aug 201
	Cognition at the Shore Speaker Series. San Diego, CA.	Mar 201
	OMG SysML Working Group Meeting. Virtual.	Sept 201
	Harvard Undergraduate Research Conference. Cambridge, MA.	Jan 201
	UC Berkeley Summer Undergraduate Research Fellows Conference. Berkeley, CA.	Aug 201
SERVICE &		
LEADERSHIP	Leadership Head Teaching Assistant	2019 - 202
	UC San Diego Cognitive Science Department	2017 - 202
	Student Volunteer Co-Chair ACM Creativity & Cognition (C&C)	201
	Graduate Social Events Coordinator	2017 - 201
	UC San Diego Cognitive Science Department	

<b>Event Coordinator</b> UC San Diego Graduate Women in Computing	2017 - 2018
Graduate Student Representative UC San Diego Cognitive Science Department	2016 - 2017
<b>External Vice-President</b> UC Berkeley Regents' & Chancellor's Scholars Association	2012 - 2013
<b>Performance Coordinator</b> Cal Wushu	2011 - 2013
Faculty Committee Co-Chair UC Berkeley Regents' & Chancellor's Scholars Association	2011 - 2012

### Reviewer

ACM Creativity & Cognition (C&C)
ACM Computer-Supported Cooperative Work (CSCW)
American Education Research Association (AERA)
ACM Designing Interactive Systems (DIS)
Cognitive Science Society Conference
ACM Human Factors in Computing Systems (CHI)

### Mentorship

Vivian Leung, Undergraduate Research Assistant Michelle Lee, Research Assistant Nicolas La Polla, Undergraduate Research Assistant Jasper Travers, Undergraduate Research Assistant