Tricia J. Ngoon Curriculum Vitae

Personal Information	Tricia J. Ngoon TeachFX, Inc. tricia.ngoon@gmail.com tngoon.github.io

Education

Ph.D., Cognitive Science *June 2021*
University of California San Diego
Dissertation : "Interactive Attunement Catalyzes Creative Learning."
Committee : Scott Klemmer (Chair), Steven Dow, William Griswold, Philip Guo, Joy Kim, Caren Walker

M.S., Cognitive Science *June 2018*
University of California San Diego

B.A., Psychology with Honors *May 2013*
University of California Berkeley
Honors Thesis : "The Efficacy of Verbal Retrieval Practice : Implications for Student Learning."
Thesis Advisor : Art P. Shimamura

Honors & Awards

Research Fellowships & Funding

NSF STEM Education Postdoctoral Research Fellowship ($300,000)	*2022*
NSF Graduate Research Fellowship Honorable Mention	*2016*
UC Berkeley Regents' & Chancellor's Scholars Research Fellowship ($3,000)	*2012-2013*
UC Berkeley Summer Undergraduate Research Fellowship ($3,000)	*2012*

Other Awards

ACM Designing Interactive Systems (DIS) Honorable Mention Paper Award (P.5)	*2023*
NSF Conference Travel Scholarships for Students to attend HCOMP/CI 2023 ($27,263)	*2023*
Selected Rising Stars in EECS Attendee	*2019*
ACM Human Factors in Computing (CHI) Honorable Mention Paper Award (P.8)	*2019*
ACM Human Factors in Computing (CHI) Honorable Mention Paper Award (P.9)	*2018*
UC San Diego Competitive Edge Fellowship	*2015*
UC Berkeley Regents' & Chancellor's Scholarship	*2010-2013*

Employment

TeachFX, Remote *2024-Present*
Research Scientist

Carnegie Mellon University, Pittsburgh, PA *2021-2024*
Postdoctoral Research Fellow

Adobe Research, San Francisco, CA *Summer 2020, Summer 2019*
Research Intern

NASA Jet Propulsion Laboratory, La Cañada Flintridge, CA *Summer 2016*
User Experience Research Intern

Stanford University School of Medicine, Palo Alto, CA *2013-2015*
Stanford Cognitive & Systems Neuroscience Laboratory
Research Assistant

University of California Berkeley, Berkeley, CA *2011-2013*
Helen Wills Neuroscience Center
Research Assistant

Publications

Conference & Journal Papers (Peer Reviewed)

P.1 Vikram Cannanure, **Tricia J. Ngoon**, Kaja Jasinska, Sharon Wolf, Amy Ogan, & Tim Brown. Understanding the Longitudinal Impacts of a Chatbot to Facilitate a Virtual Community of Practice for Teachers in Rural Côte d'Ivoire. To appear in *ACM SIGCAS/SIGCHI Journal of Computing Systems and Sustainable Societies (COMPASS'24)*.

P.2 **Tricia J. Ngoon**, Vikram Cannanure, Kaja Jasinska, Sharon Wolf, & Amy Ogan. "I believe I did not preach into the desert" : Opportunities & Challenges in Scaling Teacher Mentorship through Mobile Technology in Rural Côte d'Ivoire. To appear in *ACM Learning at Scale (L@S'24) Proceedings*.

P.3 Prasoon Patidar, **Tricia J. Ngoon**, John Zimmerman, Amy Ogan, & Yuvraj Agarwal. Enabling Student Behavior Attribution from Ambient Classroom Sensing Systems. To appear in *ACM Journal of Interactive, Mobile, Wearable, & Ubiquitous Technologies (IMWUT'24)*.

P.4 **Tricia J. Ngoon**, S Sushil, Angela Stewart, Ung-Sang Lee, Saranya Venkatramen, Neil Thawani, Prasenjit Mitra, Sherice Clarke, John Zimmerman, & Amy Ogan. 2024. ClassInSight : Designing Conversation Support Tools to Visualize Classroom Discussion for Personalized Teacher Professional Development. To appear in *ACM Human Factors in Computing (CHI'24) Proceedings*.

P.5 **Tricia J. Ngoon**, David Kovalev, Prasoon Patidar, Yuvraj Agarwal, Chris Harrison, John Zimmerman, & Amy Ogan. 2023. "An instructor can [already] keep track of 30 students" : Students' Perceptions of Smart Classrooms for Improving Teaching and Their Beliefs about Teaching and Learning. In *ACM Designing Interactive Systems (DIS'23) Proceedings*, 1277-1292. ***Honorable Mention Award (Top 5%)***

P.6 Vikram Cannanure, Eloisa Avila, **Tricia J. Ngoon**, Yves Adji, Sharon Wolf, Kaja Jasinska, Tim Brown, and 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. In *ACM Computing Systems and Sustainable Societies (COMPASS'22) Proceedings*, 122-138.

P.7 **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'21) Proceedings*, 1834-1845.

P.8 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 (CHI'19) Proceedings*, 1-13. ***Honorable Mention Award (Top 5%)***

P.9 **Tricia J. Ngoon***, C. Ailie Fraser*, Ariel Weingarten, Mira Dontcheva, & Scott Klemmer. 2018. Interactive Guidance Techniques for Improving Creative Feedback. In *ACM Human Factors in Computing Conference (CHI'18) Proceedings*, 1-11. ***Honorable Mention Award (Top 5%)*** (*indicates equal contribution)

P.10 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).

P.11 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.

Dissertation

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

Extended Abstracts & Posters (Lightly Reviewed)

E.1 **Tricia J. Ngoon**, Vivian Leung, Micah Goldwater, & Caren M. Walker. 2022. Exploration as a Learning Strategy to Support Children's Pattern Learning. Poster at *Cognitive Science Society Conference*.

E.2 **Tricia J. Ngoon**, Prasoon Patidar, Amy Ogan, Chris Harrison, Yuvraj Agarwal, & John Zimmerman. 2022. Professional Informatics : Personalized, Data-Driven Professional Development. Workshop paper at *ACM Human Factors in Computing (CHI'22)*.

E.3 **Tricia J. Ngoon**, Vivian Leung, & Caren Walker. 2022. How Exploration Supports Children's Pattern Learning. Poster at the *Cognitive Development Society (CDS) Conference*.

E.4 **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'19) Proceedings*, 591-596.

E.5 **Tricia J. Ngoon**. 2019. Overcoming Satisficing : Scaffolds for Amplifying Creativity. Graduate Student Symposium abstract in *ACM Creativity & Cognition Conference (C&C'19) Proceedings*, 670-674.

E.6 Samuel Lau, **Tricia J. Ngoon**, Vineet Pandey, & Scott Klemmer. 2019. Experiment Reconstruction Reduces Fixation on Surface Details of Explanations. In *ACM Conference on Creativity & Cognition Conference (C&C'19) 2019 Proceedings*, 578-582.

E.7 **Tricia J. Ngoon**. 2019. Inventive Scaffolds Catalyze Creative Learning. Doctoral Consortium in *ACM Human Factors in Computing Conference (CHI'19) Proceedings*, 1-5.

E.8 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 Conference (UIST'17) Companion*, 7-9.

E.9 **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 Conference (L@S'16) Proceedings*, 301-304.

E.10 **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'16) Companion.*

LECTURES AND PRESENTATIONS

Invited Talks

Pennsylvania State University College of Information Science & Technology Seminar (State College, PA)	*February 2023*
University of Pittsburgh Learning Research & Development Center Seminar (Pittsburgh, PA)	*April 2022*
Carnegie Mellon University Human-Computer Interaction Institute Seminar (Pittsburgh, PA)	*January 2022*
University of Wisconsin–Madison Human-Computer Interaction Seminar (Virtual)	*November 2020*
UC San Diego Cognitive Science Students Association Speaker Series (La Jolla, CA)	*February 2020*
UC Berkeley Institute of Design Seminar (Berkeley, CA)	*September 2019*
Stanford University Human-Computer Interaction Seminar (Palo Alto, CA)	*August 2019*
UC San Diego Cognition at the Shore Speaker Series (La Jolla, CA)	*March 2019*

TEACHING

Instructor of Record

DSGN90 : Design Seminar on Web Programming, UC San Diego (Summer 2018)

Teaching Assistant

DSGN1 : The Design of Everyday Things, Lead Teaching Assistant, UC San Diego (Winter 2019-2021, Fall 2019-2020)

COGS120/CSE170 : Interaction Design, Lead Teaching Assistant, UC San Diego (Winter 2016-2017, Spring 2018)

COGS112 : Psychology of Humor, Lead Teaching Assistant, UC San Diego (Spring 2020)

COGS17 : Neurobiology of Cognition, UC San Diego (Summer 2017)

COGS122 : Interaction Design Startup Studio, UC San Diego (Spring 2016)

COGS123 : Social Computing, UC San Diego (Spring 2016)

Guest Lecturer

INFSCI27385 : The Machines are Taking Over ? Power, Identity, and the Social Impact of AI, University of Pittsburgh (Fall 2023)

COGS17 : Neurobiology of Cognition, UC San Diego (Summer 2017)

SERVICE

Professional Service

Panelist, NSF Program	*2024*
Publications Co-Chair, ACM Creativity & Cognition Conference	*2024*
Panelist, NSF Program	*2023*
Scholarships Co-Chair, AAAI Conference on Human Computation & Crowdsourcing/ ACM Collective Intelligence Conference	*2023*
Panelist, NSF Program	*2022*
Program Committee Member, ACM Creativity & Cognition Conference	*2021, 2023*
Student Volunteer Co-Chair, ACM Creativity & Cognition Conference	*2019*

Other Service

Admissions Committee Member, CMU HCII Research Experiences for Undergraduates (REU)	*2023*
Head Teaching Assistant, UC San Diego Cognitive Science Department	*2019-2021*
Graduate Social Events Coordinator, UC San Diego Cognitive Science Department	*2017-2019*
K-12 Outreach Coordinator, UC San Diego Graduate Women in Computing	*2018*

Events Coordinator, UC San Diego Graduate Women in Computing | *2017-2018*
Graduate Student Representative, UC San Diego Cognitive Science Department | *2016-2017*
External Vice-President, UC Berkeley Regents' & Chancellor's Scholars Association | *2012-2013*
Faculty Committee Co-Chair, UC Berkeley Regents' & Chancellor's Scholars Association | *2011-2012*

Reviewer (Alphabetical Order)

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

SUPERVISION **Mentorship**

Vikram Cannanure Kamath, PhD Student (CMU) | *2021-2024*
Prasoon Patidar, PhD Student (CMU) | *2021-2024*
Luijia (Leslie) Yan, Research Assistant (CMU) | *2022-2024*
Yu (Lucia) Fang, Undergraduate Research Assistant (CMU) | *2022-2024*
Julia Gersey, Research Experiences for Undergraduates (REU) Student (CMU) | *2023*
Xinyi (Angela) Gui, Research Experiences for Undergraduates (REU) Student (CMU) | *2023*
Aastha Patel, Master's Student (CMU) | *2022-2023*
Haley Litt, Undergraduate Research Assistant (UCSD) | *2021-2023*
Prithika Acharya, Master's Student (CMU) | *2022*
Jinfan (Sara) Bai, Master's Student (CMU) | *2022*
Banso Nguyen, Undergraduate Research Assistant (UCSD) | *2021-2022*
Longjie Guo, Research Experiences for Undergraduates (REU) Student (CMU) | *2022*
David Kovalev, Research Experiences for Undergraduates (REU) Student (CMU) | *2022*
Vivian Leung, Undergraduate Research Assistant (UCSD) | *2018-2021*
Nicolas La Polla, Undergraduate Research Assistant (UCSD) | *2018-2019*
Michelle Lee, Research Assistant (UCSD) | *2018-2019*