

TRICIA J. NGOON CURRICULUM VITAE

PERSONAL INFORMATION	<p>Tricia J. Ngoon TeachFX, Inc. tricia.ngoon@gmail.com tngoon.github.io</p>	
EDUCATION	<p>Ph.D., Cognitive Science June 2021 <i>University of California San Diego</i> Dissertation : “Interactive Attunement Catalyzes Creative Learning.” Committee : Scott Klemmer (Chair), Steven Dow, William Griswold, Philip Guo, Joy Kim, Caren Walker</p> <p>M.S., Cognitive Science June 2018 <i>University of California San Diego</i></p> <p>B.A., Psychology with Honors May 2013 <i>University of California Berkeley</i> Honors Thesis : “The Efficacy of Verbal Retrieval Practice : Implications for Student Learning.” Thesis Advisor : Art P. Shimamura</p>	
HONORS & AWARDS	<p>Research Fellowships & Funding</p> <p>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</p> <p>Other Awards</p> <p>ACM Designing Interactive Systems (DIS) Honorable Mention Paper Award (P.6) 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.9) 2019 ACM Human Factors in Computing (CHI) Honorable Mention Paper Award (P.10) 2018 UC San Diego Competitive Edge Fellowship 2015 UC Berkeley Regents’ & Chancellor’s Scholarship 2010-2013</p>	
EMPLOYMENT	<p>TeachFX, Remote 2024-Present Research Scientist</p> <p>Carnegie Mellon University, Pittsburgh, PA 2021-2024 Postdoctoral Research Fellow</p> <p>Adobe Research, San Francisco, CA Summer 2020, Summer 2019 Research Intern</p> <p>NASA Jet Propulsion Laboratory, La Cañada Flintridge, CA Summer 2016 User Experience Research Intern</p> <p>Stanford University School of Medicine, Palo Alto, CA 2013-2015 <i>Stanford Cognitive & Systems Neuroscience Laboratory</i> Research Assistant</p> <p>University of California Berkeley, Berkeley, CA 2011-2013 <i>Helen Wills Neuroscience Center</i> Research Assistant</p>	
PUBLICATIONS	<p>Conference & Journal Papers (Peer Reviewed)</p> <p>P.1 Prasoon Patidar, Tricia J. Ngoon, Neeharika Vogety, Nikhil Behari, Chris Harisson, John Zimmerman, Amy Ogan, & Yuvraj Agarwal. 2024. Edulyze : Learning Analytics for Real World Classrooms at Scale. To appear in <i>Journal of Learning Analytics</i>.</p> <p>P.2 Prasoon Patidar, Tricia J. Ngoon, John Zimmerman, Amy Ogan, & Yuvraj Agarwal. Enabling Student Behavior Attribution from Ambient Classroom Sensing Systems. To appear in <i>ACM Journal of Interactive, Mobile, Wearable, & Ubiquitous Technologies (IMWUT’24)</i>.</p>	

- P.3 **Tricia J. Ngoon**, Vikram Cannanure, Kaja Jasinska, Sharon Wolf, & Amy Ogan. 2024. “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.4 Vikram Cannanure, **Tricia J. Ngoon**, Kaja Jasinska, Sharon Wolf, Amy Ogan, & Tim Brown. 2024. 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.5 **Tricia J. Ngoon**, S Sushil, Angela Stewart, Ung-Sang Lee, Saranya Venkatramen, Neil Thawani, Prasensjit 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.6 **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.7 Vikram Cannanure, Eloisa Avila, **Tricia J. Ngoon**, Yves Adjii, 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.8 **Tricia J. Ngoon**, Joy O. Kim, & Scott Klemmer. 2021. Shōwn : Adaptive Conceptual Guidance Aids Example Use in Creative Tasks. In *ACM Designing Interactive Systems (DIS’21) Proceedings*, 1834-1845.
- P.9 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.10 **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.11 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.12 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