

EDUCATION	University of California, San Diego PhD, Computer Science and Engineering	Sept 2014 – present
	University of California, San Diego M.S., Computer Science and Engineering GPA: 3.77/4.0	Dec 2016
	University of Toronto, Victoria College Honours B.Sc. with High Distinction, Specialist in Math & Computer Science, Major in Music GPA: 3.94/4.0	June 2013
RESEARCH POSITIONS	PhD Researcher, The Design Lab, UCSD Working under the supervision of Scott Klemmer: <ul style="list-style-type: none">Exploring techniques and building tools for supporting creativity by harvesting existing expert content and recommending relevant examples to people in the context of their work Previously under the supervision of Nadir Weibel: <ul style="list-style-type: none">Studied the processes of communication and uses of technology in radiation oncology, identified areas and proposed next steps for technological improvement	Fall 2014 – present
	Creative Intelligence Lab Intern, Adobe Systems Inc. Worked under the supervision of Mira Dontcheva: <ul style="list-style-type: none">Studied techniques for improving navigation of creative live stream videos	Jun – Sept 2019
	Creative Intelligence Lab Intern, Adobe Systems Inc. Worked under the supervision of Mira Dontcheva: <ul style="list-style-type: none">Studied techniques for embedding expert software videos in the creative process	Jun – Sept 2017
	User Interface Research Intern, Autodesk Inc. Worked under the supervision of Tovi Grossman: <ul style="list-style-type: none">Studied team collaboration on physical tasks, developed and evaluated a system to improve task distribution and instruction display	Jun – Sept 2016
	Creative Technologies Lab Intern, Adobe Systems Inc. Worked under the supervision of Mira Dontcheva and Holger Winnemöller: <ul style="list-style-type: none">Developed and evaluated a suggestion tool to help novice users get started in complex software, in collaboration with Scott Klemmer at UCSD	Jun – Sept 2015
	PhD Researcher, Graphics and Vision group, UCSD Worked under the supervision of Ravi Ramamoorthi: <ul style="list-style-type: none">Studied interactive real-time BRDF editing, wrote a program to render objects under environment lighting and edit reflectance properties using interactive brushes	Jan – Mar 2015
	Research Assistant, DGP Lab, University of Toronto Worked under the supervision of Kyros Kutulakos on a project in Computer Vision: <ul style="list-style-type: none">Studied BRDF acquisition and visual texture analysis, extended existing “primal-dual coding” camera system to isolate light transport based on direction and distance of travel	Sept 2013 – May 2014
	Individual Research Project Course, University of Toronto Worked under the supervision of Karen Reid: <ul style="list-style-type: none">Evaluated benefits of a Python memory visualizer, added sorting-by-patterns functionality to the CRS used in introductory CS classes for real-time analysis of student submissions	Sept – Dec 2012

PUBLICATIONS	C. Ailie Fraser , Joy Kim, Alison Thornsberry, Scott Klemmer, and Mira Dontcheva. 2019. Sharing the Studio: How Creative Livestreaming can Inspire, Educate, and Engage. <i>Proceedings of Creativity & Cognition '19</i> .	
	C. Ailie Fraser , Tricia J. Ngoon, Mira Dontcheva, and Scott Klemmer. 2019. RePlay: Contextually presenting learning videos across software applications. <i>Proceedings of CHI '19</i> .	
	Tricia J. Ngoon, C. Ailie Fraser , Ariel S. Weingarten, Mira Dontcheva, and Scott Klemmer. 2018. Interactive Guidance Techniques for Improving Creative Feedback. <i>Proceedings of CHI '18</i> . Honorable Mention.	
	C. Ailie Fraser , Tovi Grossman, and George Fitzmaurice. 2017. WeBuild: Automatically Distributing Assembly Tasks Among Collocated Workers to Improve Coordination. <i>Proceedings of CHI '17</i> .	
	C. Ailie Fraser , Mira Dontcheva, Holger Winnemöller, Sheryl Ehrlich, and Scott Klemmer. 2016. DiscoverySpace: Suggesting Actions in Complex Software. <i>Proceedings of DIS '16</i> .	
	Catherine M. Hicks, Vineet Pandey, C. Ailie Fraser , and Scott R. Klemmer. 2016. Framing Feedback: Choosing Review Environment Features that Support High Quality Peer Assessment. <i>Proceedings of CHI '16</i> .	
EXTENDED ABSTRACTS	C. Ailie Fraser , Julia M. Markel, N. James Basa, Mira Dontcheva, and Scott Klemmer. 2019. ReMap: Multimodal Help-Seeking. <i>UIST '19 Adjunct</i> .	
	C. Ailie Fraser , Joy Kim, Scott Klemmer, and Mira Dontcheva. 2019. Creative livestreaming: How sharing one's process can inspire, educate, and engage. <i>CHI '19 Live Streaming Workshop</i> .	
	C. Ailie Fraser . 2018. The Right Content at the Right Time: Contextual Examples for Just-in-time Creative Learning. <i>UIST '18 Doctoral Symposium</i> .	
	C. Ailie Fraser , Mira Dontcheva, and Scott Klemmer. 2018. Software videos: Rich content and learning potential, but a challenge for sensemaking. <i>CHI '18 Sensemaking Workshop</i> .	
	C. Ailie Fraser , Tricia J. Ngoon, Ariel S. Weingarten, Mira Dontcheva, and Scott Klemmer. 2017. CritiqueKit: A Mixed-Initiative, Real-Time Interface For Improving Feedback. <i>UIST '17 Adjunct</i> .	
	C. Ailie Fraser , Mira Dontcheva, Holger Winnemöller, and Scott Klemmer. 2016. DiscoverySpace: Crowdsourced Suggestions Onboard Novices in Complex Software. <i>CSCW '16 Companion</i> .	
HONOURS AND AWARDS	Catherine M. Hicks, C. Ailie Fraser , Purvi Desai, and Scott Klemmer. 2015. Do numeric ratings impact peer reviewers? <i>Learning at Scale '15</i> .	
	Award for Excellence in Service/Leadership, CSE Department, UCSD	June 2019
	NSERC Postgraduate Scholarship – Doctoral (PGS-D)	Fall 2017 – Spring 2019
	Adobe Research Fellowship	2017
	Award for Contributions to Diversity, CSE Department, UCSD	June 2016
	Powell Fellowship, CSE Department, UCSD	Fall 2014 – Spring 2017
	NSERC CGS-M offers from UBC and U of T (declined)	April 2014
	Simeon Heman Janes Silver Medal	Spring 2013
	Dean's List	Spring 2010 – 2013
	Prof. William Kingston and Dr. John Kingston Scholarship	Fall 2012
	University of Toronto Scholar	Fall 2011
	Jessie Macpherson Memorial Scholarship	Fall 2011
	William Pearson Scott Scholarship	Fall 2010
	Mary Ellen Carty Residence Scholarship	Fall 2009

TEACHING & MENTORSHIP	Mentor, Early Research Scholars Program, UCSD Fall 2018 – Spring 2019 Mentored two undergraduate students in the Computer Science & Engineering department on a research project.
	Mentor, GradWIC Mentorship Program, CSE Department, UCSD Fall 2017 – Spring 2019 Mentored three first-year graduate students in Computer Science & Engineering each year as part of the Graduate Women in Computing mentorship program.
	Teaching Assistant, UCSD Fall 2015 <i>CSE 216 / COGS 230 – Interaction Design Research</i> Managed course website, met with & advised students, moderated discussions, and graded projects.
	Teaching Assistant, University of Toronto Winters 2012, 2013 <i>CSC148 – Introduction to Computer Science</i> Ran weekly labs, graded exams and assignments, held office hours, and proctored exam.
OTHER EXPERIENCE	Freelance Web Design & Development Feb 2018 – present Designed, built, and continue to manage website for Camp Wabikon (www.wabikon.com)
	Web Developing Consultant Nov 2013 – May 2014 Adapted a series of pitch recognition and memory tasks written in MATLAB to run online, as part of a study on music and language for the Rotman Research Institute at Baycrest
	Casual Employee, University of Toronto June 2012 – April 2014 Web design and content for the Faculty of Arts & Science's "FAStanswers" website for first-year students.
SERVICE AND LEADERSHIP	Organizing Committee, ACM UIST 2020 Co-publicity chair for UIST 2020 conference.
	Organizing Committee, ACM Creativity & Cognition 2019 Co-website chair for Creativity & Cognition conference. Built & manage website: https://cc.acm.org/2019 .
	Graduate Women in Computing, UCSD Fall 2015 – Spring 2019 Treasurer and Mentorship Committee member 2017-2019, President 2015-2017. GradWIC aims to increase awareness of diversity issues and foster an inclusive CSE community.
	PhD Admissions Student Committee, UCSD Fall 2017 – Spring 2019 Co-leader of student committee for PhD admissions in the Computer Science and Engineering department.
	Website Lead, Diversity, Equity & Inclusion Committee, UCSD Fall 2017 – present Member of department-wide committee in Computer Science and Engineering, composed of students, faculty, and staff dedicated to highlighting and expanding efforts to improve diversity. Manage content & design for DEI website as well as special event websites.
	The Beat, UCSD Fall 2014 – Spring 2016 Assistant Music Director 2015-2016, Section Leader 2014-2015. Directed, sang, and arranged music for The Beat, an award-winning acappella choir.
	Member, Introductory Math and Science Committee Fall 2012 – Spring 2013 Faculty of Arts & Science, University of Toronto

COURSEWORK
AND SKILLS

Computer Skills:

- HTML, Javascript, PHP, CSS, Swift, Python, MATLAB, C++, Java, C, SQL, OpenGL, OpenCV, Adobe Flash and Actionscript, Microsoft Office, Adobe Photoshop, LaTeX

Relevant Coursework:

- *Computer Science*: Research in HCI and Ubiquitous Computing, Information Visualization, Computer Graphics and Vision, Web Programming, Programming Languages, Object-Oriented and Systems Programming
- *Mathematics*: Mathematical Logic, Linear Algebra, Abstract Algebra, Calculus, Real and Complex Analysis