

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:	Fall 2014 – present
	<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	
	Creative Intelligence Lab Intern, Adobe Systems Inc. Worked under the supervision of Mira Dontcheva:	Jun – Sept 2017
	<ul style="list-style-type: none">Studied techniques for embedding expert software videos in the creative process	
	User Interface Research Intern, Autodesk Inc. Worked under the supervision of Tovi Grossman:	Jun – Sept 2016
	<ul style="list-style-type: none">Studied team collaboration on physical tasks, developed and evaluated a system to improve task distribution and instruction display	
	Creative Technologies Lab Intern, Adobe Systems Inc. Worked under the supervision of Mira Dontcheva and Holger Winnemöller:	Jun – Sept 2015
<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		
PhD Researcher, Graphics and Vision group, UCSD Worked under the supervision of Ravi Ramamoorthi:	Jan – Mar 2015	
<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		
Research Assistant, DGP Lab, University of Toronto Worked under the supervision of Kyros Kutulakos on a project in Computer Vision:	Sept 2013 – May 2014	
<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		
Individual Research Project Course, University of Toronto Worked under the supervision of Karen Reid:	Sept – Dec 2012	
<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		

PUBLICATIONS	<p>Tricia J. Ngoon, C. Ailie Fraser, Ariel S. Weingarten, Mira Dontcheva, and Scott Klemmer. 2017. Interactive Guidance Techniques for Improving Creative Feedback. <i>To appear in Proceedings of CHI '18</i>. Honorable Mention.</p> <p>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>.</p> <p>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>.</p> <p>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>.</p>																								
EXTENDED ABSTRACTS	<p>C. Ailie Fraser, Mira Dontcheva, and Scott Klemmer. 2018. Software videos: Rich content and learning potential, but a challenge for sensemaking. <i>To appear at CHI '18 Sensemaking Workshop</i>. (Workshop Paper)</p> <p>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>. (Demo)</p> <p>C. Ailie Fraser, Mira Dontcheva, Holger Winnemöller, and Scott Klemmer. 2016. DiscoverySpace: Crowdsourced Suggestions Onboard Novices in Complex Software. <i>CSCW '16 Companion</i>. (Demo)</p> <p>Catherine M. Hicks, C. Ailie Fraser, Purvi Desai, and Scott Klemmer. 2015. Do numeric ratings impact peer reviewers? <i>Learning at Scale '15</i>. (Poster)</p>																								
HONOURS AND AWARDS	<table border="0" style="width: 100%;"> <tr> <td style="width: 70%;">NSERC Postgraduate Scholarship – Doctoral (PGS-D)</td> <td style="text-align: right;">Fall 2017 – Spring 2019</td> </tr> <tr> <td>Adobe Research Fellowship</td> <td style="text-align: right;">2017</td> </tr> <tr> <td>Contributions to Diversity Award, CSE Department, UC San Diego</td> <td style="text-align: right;">June 2016</td> </tr> <tr> <td>Powell Fellowship, CSE Department, UC San Diego</td> <td style="text-align: right;">Fall 2014 – Spring 2017</td> </tr> <tr> <td>NSERC CGS-M offers from UBC and U of T (declined)</td> <td style="text-align: right;">April 2014</td> </tr> <tr> <td>Simeon Heman Janes Silver Medal</td> <td style="text-align: right;">Spring 2013</td> </tr> <tr> <td>Dean's List</td> <td style="text-align: right;">Spring 2010 – 2013</td> </tr> <tr> <td>Prof. William Kingston and Dr. John Kingston Scholarship</td> <td style="text-align: right;">Fall 2012</td> </tr> <tr> <td>University of Toronto Scholar</td> <td style="text-align: right;">Fall 2011</td> </tr> <tr> <td>Jessie Macpherson Memorial Scholarship</td> <td style="text-align: right;">Fall 2011</td> </tr> <tr> <td>William Pearson Scott Scholarship</td> <td style="text-align: right;">Fall 2010</td> </tr> <tr> <td>Mary Ellen Carty Residence Scholarship</td> <td style="text-align: right;">Fall 2009</td> </tr> </table>	NSERC Postgraduate Scholarship – Doctoral (PGS-D)	Fall 2017 – Spring 2019	Adobe Research Fellowship	2017	Contributions to Diversity Award, CSE Department, UC San Diego	June 2016	Powell Fellowship, CSE Department, UC San Diego	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
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OTHER EXPERIENCE	<p>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</p> <p>Casual Employee, University of Toronto June 2012 – April 2014 Web design and content for the Faculty of Arts & Science's new "FAStanswers" website for first-years (answers.artsci.utoronto.ca)</p>
SERVICE AND LEADERSHIP	<p>Organizing Committee, ACM Creativity & Cognition 2019 Co-website chair for Creativity & Cognition conference. Built website: http://cc.acm.org/2019.</p> <p>Graduate Women in Computing, UCSD Fall 2015 – present Treasurer and Undergraduate Coordinator 2017-2018, President 2015-2017. GradWIC aims to increase awareness of diversity issues and foster an inclusive CSE community.</p> <p>PhD Admissions Student Committee, UCSD Fall 2017 – present Co-leader of student committee for PhD admissions in the Computer Science and Engineering department.</p> <p>Diversity 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.</p> <p>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.</p> <p>Member, Introductory Math and Science Committee Fall 2012 – Spring 2013 Faculty of Arts & Science, University of Toronto</p>
COURSEWORK AND SKILLS	<p>Computer Skills:</p> <ul style="list-style-type: none"> • HTML, Javascript, PHP, CSS, Python, MATLAB, C++, Java, C, SQL, OpenGL, OpenCV, Adobe Flash and Actionscript, Microsoft Office, Adobe Photoshop, LaTeX <p>Relevant Coursework:</p> <ul style="list-style-type: none"> • 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