

EDUCATION	<b>University of California, San Diego</b> PhD, Computer Science and Engineering	<b>Sept 2014 – present</b>
	<b>University of California, San Diego</b> M.S., Computer Science and Engineering GPA: 3.77/4.0	<b>Dec 2016</b>
	<b>University of Toronto, Victoria College</b> Honours B.Sc. with High Distinction, Specialist in Math & Computer Science, Major in Music GPA: 3.94/4.0	<b>June 2013</b>
RESEARCH POSITIONS	<b>PhD Researcher, The Design Lab, UCSD</b> Working under the supervision of Scott Klemmer:	<b>Fall 2014 – present</b>
	<ul style="list-style-type: none"><li>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</li></ul> Previously under the supervision of Nadir Weibel:	
	<ul style="list-style-type: none"><li>Studied the processes of communication and uses of technology in radiation oncology, identified areas and proposed next steps for technological improvement</li></ul>	
	<b>Creative Intelligence Lab Intern, Adobe Systems Inc.</b> Worked under the supervision of Mira Dontcheva:	<b>Jun – Sept 2017</b>
	<ul style="list-style-type: none"><li>Studied techniques for embedding expert software videos in the creative process</li></ul>	
	<b>User Interface Research Intern, Autodesk Inc.</b> Worked under the supervision of Tovi Grossman:	<b>Jun – Sept 2016</b>
	<ul style="list-style-type: none"><li>Studied team collaboration on physical tasks, developed and evaluated a system to improve task distribution and instruction display</li></ul>	
	<b>Creative Technologies Lab Intern, Adobe Systems Inc.</b> Worked under the supervision of Mira Dontcheva and Holger Winnemöller:	<b>Jun – Sept 2015</b>
<ul style="list-style-type: none"><li>Developed and evaluated a suggestion tool to help novice users get started in complex software, in collaboration with Scott Klemmer at UCSD</li></ul>		
<b>PhD Researcher, Graphics and Vision group, UCSD</b> Worked under the supervision of Ravi Ramamoorthi:	<b>Jan – Mar 2015</b>	
<ul style="list-style-type: none"><li>Studied interactive real-time BRDF editing, wrote a program to render objects under environment lighting and edit reflectance properties using interactive brushes</li></ul>		
<b>Research Assistant, DGP Lab, University of Toronto</b> Worked under the supervision of Kyros Kutulakos on a project in Computer Vision:	<b>Sept 2013 – May 2014</b>	
<ul style="list-style-type: none"><li>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</li></ul>		
<b>Individual Research Project Course, University of Toronto</b> Worked under the supervision of Karen Reid:	<b>Sept – Dec 2012</b>	
<ul style="list-style-type: none"><li>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</li></ul>		

PUBLICATIONS	<p>Tricia J. Ngoon, <b>C. Ailie Fraser</b>, Ariel S. Weingarten, Mira Dontcheva, and Scott Klemmer. 2017. Interactive Guidance Techniques for Improving Creative Feedback. <i>Proceedings of CHI '18</i>. Honorable Mention.</p> <p><b>C. Ailie Fraser</b>, 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><b>C. Ailie Fraser</b>, 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, <b>C. Ailie Fraser</b>, 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><b>C. Ailie Fraser</b>. 2018. The Right Content at the Right Time: Contextual Examples for Just-in-time Creative Learning. <i>To appear at UIST '18 Doctoral Symposium</i>.</p> <p><b>C. Ailie Fraser</b>, Mira Dontcheva, and Scott Klemmer. 2018. Software videos: Rich content and learning potential, but a challenge for sensemaking. <i>CHI '18 Sensemaking Workshop</i>. (Workshop Paper)</p> <p><b>C. Ailie Fraser</b>, 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><b>C. Ailie Fraser</b>, 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, <b>C. Ailie Fraser</b>, 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;"><b>Fall 2017 – Spring 2019</b></td> </tr> <tr> <td>Adobe Research Fellowship</td> <td style="text-align: right;"><b>2017</b></td> </tr> <tr> <td>Contributions to Diversity Award, CSE Department, UC San Diego</td> <td style="text-align: right;"><b>June 2016</b></td> </tr> <tr> <td>Powell Fellowship, CSE Department, UC San Diego</td> <td style="text-align: right;"><b>Fall 2014 – Spring 2017</b></td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td>NSERC CGS-M offers from UBC and U of T (declined)</td> <td style="text-align: right;"><b>April 2014</b></td> </tr> <tr> <td>Simeon Heman Janes Silver Medal</td> <td style="text-align: right;"><b>Spring 2013</b></td> </tr> <tr> <td>Dean's List</td> <td style="text-align: right;"><b>Spring 2010 – 2013</b></td> </tr> <tr> <td>Prof. William Kingston and Dr. John Kingston Scholarship</td> <td style="text-align: right;"><b>Fall 2012</b></td> </tr> <tr> <td>University of Toronto Scholar</td> <td style="text-align: right;"><b>Fall 2011</b></td> </tr> <tr> <td>Jessie Macpherson Memorial Scholarship</td> <td style="text-align: right;"><b>Fall 2011</b></td> </tr> <tr> <td>William Pearson Scott Scholarship</td> <td style="text-align: right;"><b>Fall 2010</b></td> </tr> <tr> <td>Mary Ellen Carty Residence Scholarship</td> <td style="text-align: right;"><b>Fall 2009</b></td> </tr> </table>	NSERC Postgraduate Scholarship – Doctoral (PGS-D)	<b>Fall 2017 – Spring 2019</b>	Adobe Research Fellowship	<b>2017</b>	Contributions to Diversity Award, CSE Department, UC San Diego	<b>June 2016</b>	Powell Fellowship, CSE Department, UC San Diego	<b>Fall 2014 – Spring 2017</b>			NSERC CGS-M offers from UBC and U of T (declined)	<b>April 2014</b>	Simeon Heman Janes Silver Medal	<b>Spring 2013</b>	Dean's List	<b>Spring 2010 – 2013</b>	Prof. William Kingston and Dr. John Kingston Scholarship	<b>Fall 2012</b>	University of Toronto Scholar	<b>Fall 2011</b>	Jessie Macpherson Memorial Scholarship	<b>Fall 2011</b>	William Pearson Scott Scholarship	<b>Fall 2010</b>	Mary Ellen Carty Residence Scholarship	<b>Fall 2009</b>
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OTHER EXPERIENCE	<p><b>Web Developing Consultant</b> <span style="float: right;"><b>Nov 2013 – May 2014</b></span> 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><b>Casual Employee, University of Toronto</b> <span style="float: right;"><b>June 2012 – April 2014</b></span> Web design and content for the Faculty of Arts &amp; Science's new "FAStanswers" website for first-years (<a href="http://answers.artsci.utoronto.ca">answers.artsci.utoronto.ca</a>)</p>
SERVICE AND LEADERSHIP	<p><b>Organizing Committee, ACM Creativity &amp; Cognition 2019</b> Co-website chair for Creativity &amp; Cognition conference. Built website: <a href="https://cc.acm.org/2019">https://cc.acm.org/2019</a>.</p> <p><b>Graduate Women in Computing, UCSD</b> <span style="float: right;"><b>Fall 2015 – present</b></span> Treasurer 2017-2019, President 2015-2017. GradWIC aims to increase awareness of diversity issues and foster an inclusive CSE community.</p> <p><b>PhD Admissions Student Committee, UCSD</b> <span style="float: right;"><b>Fall 2017 – present</b></span> Co-leader of student committee for PhD admissions in the Computer Science and Engineering department.</p> <p><b>Diversity Committee, UCSD</b> <span style="float: right;"><b>Fall 2017 – present</b></span> 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><b>The Beat, UCSD</b> <span style="float: right;"><b>Fall 2014 – Spring 2016</b></span> Assistant Music Director 2015-2016, Section Leader 2014-2015. Directed, sang, and arranged music for The Beat, an award-winning acappella choir.</p> <p><b>Member, Introductory Math and Science Committee</b> <span style="float: right;"><b>Fall 2012 – Spring 2013</b></span> Faculty of Arts &amp; Science, University of Toronto</p>
COURSEWORK AND SKILLS	<p><b>Computer Skills:</b></p> <ul style="list-style-type: none"> <li>• HTML, Javascript, PHP, CSS, Python, MATLAB, C++, Java, C, SQL, OpenGL, OpenCV, Adobe Flash and Actionscript, Microsoft Office, Adobe Photoshop, LaTeX</li> </ul> <p><b>Relevant Coursework:</b></p> <ul style="list-style-type: none"> <li>• Computer Science: Research in HCI and Ubiquitous Computing, Information Visualization, Computer Graphics and Vision, Web Programming, Programming Languages, Object-Oriented and Systems Programming</li> <li>• Mathematics: Mathematical Logic, Linear Algebra, Abstract Algebra, Calculus, Real and Complex Analysis</li> </ul>