filie Fraser

EDUCATION University of California, San Diego

Apr 2020

PhD, Computer Science Advisor: Scott Klemmer

Committee: Mira Dontcheva, Jim Hollan, Bill Griswold, Philip Guo, Björn Hartmann

University of California, San Diego

Dec 2016

M.S., Computer Science

GPA: 3.77/4.0

University of Toronto, Victoria College

Jun 2013

Honours B.Sc. with High Distinction, Specialist in Math & Computer Science, Major in Music

GPA: 3.94/4.0

RESEARCH PhD Researcher, Design Lab, UCSD

Oct 2014 - Mar 2020

POSITIONS

Advisor: Scott Klemmer

Explored techniques and built tools for supporting creativity by harvesting existing expert content

and recommending relevant examples to people in the context of their work

Creative Intelligence Lab Intern, Adobe Systems Inc.

Jun - Sep 2019

Supervisor: Mira Dontcheva

Developed and evaluated techniques for automatically segmenting creative live stream videos

Creative Intelligence Lab Intern, Adobe Systems Inc.

Jun - Sep 2017

Supervisor: Mira Dontcheva

Developed techniques for embedding expert software videos in the creative process

User Interface Research Intern, Autodesk Inc.

Jun - Sep 2016

Supervisor: Tovi Grossman

Developed and evaluated a system for distribution of collaborative physical task instructions

Creative Technologies Lab Intern, Adobe Systems Inc.

Jun - Sep 2015

Supervisors: Mira Dontcheva and Holger Winnemöller, collaboration with Scott Klemmer Developed and evaluated a suggestion tool to help novice users get started in complex software

Research Assistant, DGP Lab, University of Toronto

Sep 2013 - May 2014

Advisor: Kyros Kutulakos

Explored camera methods for isolating light transport based on direction and distance of travel

Individual Research Project Course, University of Toronto

Sep - Dec 2012

Advisor: Karen Reid

Improved Classroom Response System for real-time analysis of programming submissions

PUBLICATIONS

- **C. Ailie Fraser**, Joy Kim, Valentina Shin, Joel Brandt, and Mira Dontcheva. 2020. Temporal Segmentation of Creative Live Streams. *Proceedings of CHI '20*.
- C. Ailie Fraser, Mira Dontcheva, Joy Kim, and Scott Klemmer. How Live Streaming Does (and Doesn't) Change Creative Practices. 2020. *interactions Jan/Feb 2020*.
- C. Ailie Fraser, Joy Kim, Alison Thornsberry, Scott Klemmer, and Mira Dontcheva. 2019. Sharing the Studio: How Creative Livestreaming can Inspire, Educate, and Engage. *Proceedings of Creativity & Cognition '19*.
- **C.** Ailie Fraser, Tricia J. Ngoon, Mira Dontcheva, and Scott Klemmer. 2019. RePlay: Contextually presenting learning videos across software applications. *Proceedings of CHI '19.*
- Tricia J. Ngoon, C. Ailie Fraser, Ariel S. Weingarten, Mira Dontcheva, and Scott Klemmer. 2018. Interactive Guidance Techniques for Improving Creative Feedback. *Proceedings of CHI '18.* Honorable Mention.
- **C. Ailie Fraser**, Tovi Grossman, and George Fitzmaurice. 2017. WeBuild: Automatically Distributing Assembly Tasks Among Collocated Workers to Improve Coordination. *Proceedings of CHI '17*.
- **C. Ailie Fraser**, Mira Dontcheva, Holger Winnemöller, Sheryl Ehrlich, and Scott Klemmer. 2016. DiscoverySpace: Suggesting Actions in Complex Software. *Proceedings of DIS '16.*

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. *Proceedings of CHI '16*.

EXTENDED ABSTRACTS

- **C. Ailie Fraser**, Julia M. Markel, N. James Basa, Mira Dontcheva, and Scott Klemmer. 2019. ReMap: Multimodal Help-Seeking. *UIST '19 Adjunct.*
- **C. Ailie Fraser**, Joy Kim, Scott Klemmer, and Mira Dontcheva. 2019. Creative livestreaming: How sharing one's process can inspire, educate, and engage. *CHI '19 Live Streaming Workshop*.
- **C. Ailie Fraser**. 2018. The Right Content at the Right Time: Contextual Examples for Just-in-time Creative Learning. *UIST '18 Doctoral Symposium*.
- **C. Ailie Fraser**, Mira Dontcheva, and Scott Klemmer. 2018. Software videos: Rich content and learning potential, but a challenge for sensemaking. *CHI '18 Sensemaking Workshop*.
- **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. *UIST '17 Adjunct.*
- C. Ailie Fraser, Mira Dontcheva, Holger Winnemöller, and Scott Klemmer. 2016. DiscoverySpace: Crowdsourced Suggestions Onboard Novices in Complex Software. *CSCW '16 Companion*.

Catherine M. Hicks, **C. Ailie Fraser**, Purvi Desai, and Scott Klemmer. 2015. Do numeric ratings impact peer reviewers? *Learning at Scale '15*.

Honours	Award for Excellence in Service/Leadership, CSE Department, UCSD	June 2019
AND A WARDS	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 Spring 2010 - 2013 Dean's List 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 & Mentor, Early Research Scholars Program, UCSD Fall 2018 – Spring 2019

MENTORSHIP 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

CSE 216 / COGS 230 – Interaction Design Research

Managed course website, advised students, moderated discussions, and graded projects.

Teaching Assistant, University of Toronto

Winters 2012, 2013

CSC148 – Introduction to Computer Science

Ran weekly labs, graded exams and assignments, held office hours, and proctored exam.

OTHER Freelance Web Design & Development Feb 2018 – present

EXPERIENCE 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

Jun 2012 - Apr 2014

Web design and content for the Faculty of Arts & Science's "FAStanswers" website for first-year students.

LEADERSHIP

Co-publicity chair for UIST 2020 conference.

Organizing Committee, ACM Creativity & Cognition

2019

Co-website chair for Creativity & Cognition conference. Built & managed website: https://cc.acm.org/2019.

Website Lead, Diversity, Equity & Inclusion Committee, UCSD Fall 2017 – Winter 2020

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 <u>DEI website</u> as well as special event websites.

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.

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

Computer Skills:

AND 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