

## MORGAN DIXON

Cheeseburger Therapy  
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### EDUCATION

- 2015 **University of Washington**, Seattle, WA  
Ph.D. Candidate in Computer Science & Engineering  
Advisor: James Fogarty
- 2010 **University of Washington**, Seattle, WA  
M.S. Computer Science & Engineering  
Advisor: James Fogarty
- 2008 **University of Maryland**, College Park, MD  
B.S. Computer Science and Mathematics  
Computer Science Departmental Honors  
Advisor: Francois Guimbretière

### PROFESSIONAL EXPERIENCE

- 2017-PRESENT **Cheeseburger Therapy**, Seattle, WA  
*Founder, CEO, Chief Illustrator*  
Designing, researching, and deploying a free community-based website where members can learn and practice thought skills (new and existing mental health practices that traditionally would be taught in counseling or psychotherapy).
- 2016-2017 **Adobe Systems**, Seattle, WA  
*Researcher in the Creative Technologies Lab*  
Design, test, and deploy new tools for building interfaces and new interaction capabilities enabled by these advances.
- 2015-PRESENT **University of Washington**, Seattle, WA  
Computer Science & Engineering  
*Graduate Research Assistant*  
With Professor James Fogarty.  
Researched and developed new tools for building interfaces. Designing and evaluating new interaction capabilities enabled by these advances.
- 2008-2015 **Microsoft Research**, Redmond, WA  
*Research Intern*  
With Desney Tan, Scott Saponas, and Dan Morris. Designed and prototyped methods for continuously monitoring blood pressure using commodity hardware (e.g., webcams and mobile devices).
- 2012 **IBM Research**, Almaden, CA  
*Research Intern*  
With Jeff Nichols and Tessa Lau. Explored a crowdsourcing-based system for reverse-engineering the underlying data model of existing web pages, and for using these model to enable interface re-authoring and mashups.

- 2008 **Microsoft Research**, Redmond, WA  
*Research Intern*  
 With Ken Hinckley, Raman Sarin, Francois Guimbretiere and Ravin Balakrishnan. Designed, prototyped, programmed, and evaluated Codex, a dual-surface tablet computer for individual and collaborative use. Awarded the Microsoft Productivity Fair Thought Leadership Award.
- 2005 **Microsoft**, Redmond, WA  
*Intern*  
 Designed, implemented, and evaluated peer-to-peer games for the MSN Messenger (now Windows Live Messenger). Collaborated with MSN to critique and design future instant messenger client interfaces.

### CONFERENCE ARTICLES

- [C.13] Amanda Swearngin, Mira Dontcheva, Wilmont Li, Joel Brandt, **Morgan Dixon**, Andrew J. Ko. Rewire: Interface Design Assistance from Examples. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI 2018).
- [C.12] Jasper O’Leary, Holder Winnemöller, Wilmont Li, Mira Dontcheva, **Morgan Dixon**. Charette: Supporting In-Person Discussions around Iterations in User Interface Design. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI 2018).
- [C.11] **Morgan Dixon**, Conrad Nied, and James Fogarty (2014). Prefab Layers and Prefab Annotations: Extensible Pixel-Based Interpretation of Graphical Interfaces. *Proceedings of the ACM Symposium on User Interface Software and Technology* (UIST 2014). 221-230. 22.2% acceptance rate.
- [C.10] **Morgan Dixon**, Gierad Laput, and James Fogarty (2014). PixelBased Methods for Widget State and Style in a Runtime Implementation of Sliding Widgets. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI 2014). 2231-2240. 23% acceptance rate.
- [C.9] **Morgan Dixon**, James Fogarty, and Jacob O. Wobbrock (2012). A GeneralPurpose Target-Aware Pointing Enhancement Using Pixel-Level Analysis of Graphical Interfaces. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI 2012). 3167-3176. 23% acceptance rate.
- [C.8] **Morgan Dixon**, Daniel Leventhal, James Fogarty (2011). Content and Hierarchy in Pixel-Based Methods for Reverse Engineering Interface Structure. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI 2011), 969-978. 26% acceptance rate.
- [C.7] Leah Findlater, Alex Jansen, Kristen Shinohara, **Morgan Dixon**, Peter Kamb, Joshua Rakita, and Jacob O. Wobbrock. (2010). Enhanced Area Cursors: Reducing Fine-Pointing Demands for People with Motor Impairments. *Proceedings of the ACM Symposium on User Interface Software and Technology* (UIST 2010), 153-162. 18% acceptance rate.

- [C.6] **Morgan Dixon** and James Fogarty. (2010). Prefab: Implementing Advanced Behaviors Using Pixel-Based Reverse Engineering of Interface Structure. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2010)*, 1525-1534. 22% acceptance rate.
- BEST PAPER WINNER**
- [C.5] Yang Li, Xiang Cao, Katherine Everitt, **Morgan Dixon**, and James Landay (2010). Framewire: A Tool for Automatically Extracting Interaction Logic from Paper Prototyping Tests. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2010)*, 503-512. 22% acceptance rate.
- [C.4] Ken Hinckley, **Morgan Dixon**, Raman Sarin, François Guimbretière, and Ravin Balakrishnan. (2009). Codex: A Dual Screen Tablet Computer. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2009)*, 1933-1942. 24% acceptance rate.
- [C.3] **Morgan Dixon**, François Guimbretière, and Nick Chen. (2008). Optimal Parameters for Efficient Crossing-Based Dialog Boxes. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2008)*, 1623-1632. 22% acceptance rate.
- [C.2] Nick Chen, François Guimbretière, **Morgan Dixon**, Cassandra Lewis, and Maneesh Agrawala. (2008). Navigation Techniques for Dual-Display E-Book Readers. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2008)*, 1779-1788. 22% acceptance rate.
- [C.1] François Guimbretière, **Morgan Dixon**, and Ken Hinckley. (2007). ExperiScope: An Analysis Tool for Interaction Data. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2007)*, 1333-1342. 24% acceptance rate.

## WORKSHOP PAPERS

- [W.1] **Morgan Dixon** and James Fogarty (2010). Prefab: What if Every GUI were Open-Source. Presented at the *ACM Conference on Human Factors in Computing Systems Workshop on the Future of FLOSS in CHI Research and Practice (CHI 2010)*.

## RELATED PRESS

- [P.9] Prefab May Give Any Software Open Sourcing. Katherine Noyes. *LinuxInsider*, April 2, 2010.
- [P.8] Giving Users the Power to Customize Proprietary Software. Jon Gordon. *Future Tense*, April 1, 2010.
- [P.7] University of Washington's Prefab Tool Promises to 'Unlock the Desktop.' Donald Melanson. *Engadget*, April 1, 2010.
- [P.6] Re-Inventing the Graphical User Interface. *Computing Community Consortium Highlight of the Week*, March 31, 2010.

- [P.5] Software Customized By Users: UW Prof Wants to Revolutionize UI. Ted Bishop. *Tech Flash*, March 31, 2010.
- [P.4] New Application Could Make All Software ‘Open Source.’ Nick Barber. *PCWorld*, March 31, 2010.
- [P.3] UW Researchers Look to Reinvent the Graphical User Interface. Nick Eaton. *Seattle PI*, March 30, 2010.
- [P.2] Codex and InkSeine – The Roots of Microsoft’s Courier? Joshua Topolsky. *Engadget*, September 23, 2009.
- [P.1] Microsoft Research Codex Project Tries Two Screens on for Size. Donald Melanson. *Engadget*, October 1, 2008.

## TEACHING EXPERIENCE

**University of Washington**, Seattle, WA

2013 Computer Science & Engineering

*Instructor*

Undergraduate Introduction to HCI.

Prepared and conducted lectures on the fundamental aspects of HCI and iterative design, and mentored student teams in the iterative design of novel personal informatics applications. [Course website](#). [Student projects page](#).

2009 **University of Washington**, Seattle, WA

Computer Science & Engineering

*Teaching Assistant*

Undergraduate Introduction to HCI with Professor James A. Fogarty. Mentored student teams in their iterative design of novel mobile applications.

2007 **University of Maryland**, College Park, MD

*Instructor for the Passport Program*

Introduction to Programming

Primarily responsible for 88 underrepresented middle school students.

## INVITED TALKS AND GUEST LECTURES

- 2015 “Unlocking Interaction via Pixel-Based Reverse Engineering”  
Job talks at: Adobe Systems, Cornell University, Georgia Tech, Google, Harvard University, MIT, Princeton University, Stanford University, University of Wisconsin
- 2014 “Pixel-Based Reverse Engineering of Graphical Interfaces”  
PhD Thesis Defense, University of Washington
- “Prefab Layers and Prefab Annotations”  
ACM symposium on User Interface Software and Technology (UIST 2014).

- 2014 “Pixel-Based Methods for Widget State and Style in a Runtime Implementation of Sliding Widgets”  
SIGCHI Conference on Human Factors in Computing (CHI 2014).  
  
“Unlocking Interaction by Pixel-Based Reverse Engineering Graphical Interfaces”  
University of Washington Affiliates Day 2014
- 2013 “Prefab: Pixel-Based Reverse Engineering of Graphical Interfaces”  
Doctoral Consortium at the ACM symposium on User Interface Software and Technology (UIST 2013).
- 2012 “Prefab: Modifying Any Graphical Interface”  
University of Washington Industrial Affiliates Day 2012  
  
“A GeneralPurpose Target-Aware Pointing Enhancement”  
SIGCHI Conference on Human Factors in Computing (CHI 2012).
- 2011 “Content and Hierarchy in Pixel-Based Reverse Engineering”  
SIGCHI Conference on Human Factors in Computing (CHI 2011).  
  
“Content and Hierarchy in Pixel-Based Reverse Engineering”  
University of Washington Affiliates Day 2011
- 2010 “What if we could modify any computer program?”  
Summer Academy for Advancing Deaf and Hard of Hearing in Computing  
  
“Prefab: Implementing Advanced Behaviors Using Pixel-Based Reverse Engineering of Interface Structure”  
UW iSchool Undergraduate Input and Interaction Course  
  
“Prefab: Pixel-Based Reverse Engineering of Graphical Interfaces”  
SIGCHI Conference on Human Factors in Computing (CHI 2010).
- 2008 “Optimal Parameters for Efficient Crossing-Based Dialog Boxes”  
SIGCHI Conference on Human Factors in Computing (CHI 2008).
- 2007 ExperiScope: An Analysis Tool for Interaction Data.  
SIGCHI Conference on Human Factors in Computing (CHI 2007).

### ADVISING AND MENTORSHIP

- 2016-2017 Jasper O’Leary. B.S. Computer Science. Intern at Adobe.  
Amanda Swearngin. PhD in Computer Science. Intern at Adobe.
- 2012-2013 Stephen Joe, B.S. Computer Science and Engineering (2014)  
2010-2011 Cullen Walsh, B.S. Computer Science and Engineering (2012)
- 2010-2011 Orkhan Muradov, B.S. Computer Science & Engineering (2011)  
2014-2015 Jennifer Kang, B.S. Information Science (2016)

## PROFESSIONAL SERVICE

- 2014 **CHI 2014 Technical Program Committee Member**  
CHI 2014, Toronto, CA
- 2009 **Assistant to CHI 2009 Technical Program Chairs**  
CHI 2009, Boston, MA  
With Ken Hinckley and Meredith Ringel Morris.
- 2008-PRESENT **Reviewer**  
UIST 2015 CHI2015 UIST 2014 CHI 2014 UIST 2013 CHI 2013  
UIST 2012 CHI 2012 UIST 2011 CHI 2011 CHI 2010 CHI 2009  
CHI 2008 Tabletop 2009
- 2007-2008 **Education Committee Undergraduate Representative**  
Computer Science Department, University of Maryland, College Park,  
MD  
Collaborated with Education Committee members to improve the  
undergraduate computer science curriculum.

## AWARDS AND HONORS

- 2011-2013 Microsoft Research Ph.D. Fellowship  
2010 UW CSE Industrial Affiliates Madrona Prize  
2010-2011 UW College of Engineering Osberg Fellowship  
2008-2010 NSF Graduate Research Fellowship: Honorable Mention  
2008-2011 ARCS Fellowship  
2008-2009 Hacherl Graduate Fellowship in Computer Science & Engineering  
2008 CRA Outstanding Undergraduate Award: Honorable Mention  
2008 Microsoft Productivity Fair Thought Leadership Award  
2004-2008 IBM Thomas J. Watson Memorial Scholarship