# Daniel A. Epstein

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## Education

**2012-(2018)** University of Washington
Ph.D. Candidate in Computer Science & Engineering (ABD)
Areas: Human-Computer Interaction, Ubiquitous Computing
Advisors: James Fogarty, Sean Munson
Committee: James Fogarty, Sean Munson, David McDonald, Mira Dontcheva, Jessica Hullman
M.S. Computer Science & Engineering, Winter 2014

**2008-2012** University of Virginia
B.S. Computer Science with Highest Distinction
Advisors: Kevin Skadron, Aaron Bloomfield

## Conference Publications

**2017** **C11** 
**Examining Menstrual Tracking to Inform the Design of Personal Informatics Tools**
Daniel A. Epstein, Nicole B. Lee, Jennifer H. Kang, Elena Agapie, Jessica Schroeder, Laura R. Pina, James Fogarty, Julie A. Kientz, Sean A. Munson
CHI 2017 [Acceptance Rate 25%] best paper award, top 1%

**C10** 
**TummyTrials: A Feasibility Study of Using Self-Experimentation to Detect Individualized Food Triggers**
Ravi Karkar, Jessica Schroeder, Daniel A. Epstein, Laura R. Pina, Jeffrey Scofield, James Fogarty, Julie A. Kientz, Sean A. Munson, Roger Vilardaga, Jasmine Zia
CHI 2017 [Acceptance Rate 25%] best paper honorable mention, top 5%

**2016** **C9**
**Reconsidering the Device in the Drawer: Lapses as a Design Opportunity in Personal Informatics**
Daniel A. Epstein, Jennifer H. Kang, Laura R. Pina, James Fogarty, Sean A. Munson
UbiComp 2016 [Acceptance Rate 24%]

**C8**
**Taking 5: Work-Breaks, Productivity, and Opportunities for Personal Informatics for Knowledge Workers**
Daniel A. Epstein, Daniel Avrahami, Jacob T. Biehl
CHI 2016 [Acceptance Rate 23%]

**C7**
**Crumbs: Lightweight Daily Food Challenges to Promote Engagement and Mindfulness**
Daniel A. Epstein, Felicia Cordeiro, James Fogarty, Gary Hsieh, Sean A. Munson
CHI 2016 [Acceptance Rate: 23%]

**C6**
**Beyond Abandonment to Next Steps: Understanding and Designing for Life after Personal Informatics Tool Use**
Daniel A. Epstein, Monica Caraway, Chuck Johnston, An Ping, James Fogarty, Sean A. Munson
CHI 2016 [Acceptance Rate: 23%]

**2015** **C5**
**A Lived Informatics Model of Personal Informatics**
Daniel A. Epstein, An Ping, James Fogarty, Sean A. Munson
UbiComp 2015 [Acceptance Rate: 30%]

C4 **Barriers and Negative Nudges: Exploring Challenges in Food Journaling**

Felicia Cordeiro, Daniel A. Epstein, Edison Thomaz, Elizabeth Bales, Arvind K. Jagannathan, Gregory D. Abowd, James Fogarty
CHI 2015 [Acceptance Rate: 23%] best paper honorable mention, top 5%

C3 **From "nobody cares" to "way to go!": A Design Framework for Social Sharing in Personal Informatics**
Daniel A. Epstein, Bradley H. Jacobson, Elizabeth Bales, David W. McDonald, Sean A. Munson
CSCW 2015 [Acceptance Rate: 28%]

**2014** C2 **Taming Data Complexity in Lifelogs: Exploring Visual Cuts of Personal Informatics Data**
Daniel A. Epstein, Felicia Cordeiro, Elizabeth Bales, James Fogarty, Sean A. Munson
DIS 2014 [Acceptance Rate: 26%]

**2013** C1 **Fine-Grained Sharing of Sensed Physical Activity: A Value Sensitive Approach**
Daniel A. Epstein, Alan Borning, James Fogarty
UbiComp 2013 [Acceptance Rate: 23%]

## Journal Publications

**2017** J2 **Friends Don't Need Receipts: The Curious Case of Social Awareness Streams in the Mobile Payment App Venmo**
Monica Caraway, Daniel A. Epstein, Sean A. Munson
Proceedings of the ACM: Human-Computer Interaction, Volume 1 Issue 2 [Acceptance Rate 27%]

J1 **Semi-automated tracking: A Balanced Approach for Self-Monitoring Applications**
Eun Kyoung Choe, Saeed Abdullah, Mashfiqui Rabbi, Edison Thomaz, Daniel A. Epstein, Matthew Kay, Felicia Cordeiro, Gregory D. Abowd, Tanzeem Choudhury, James Fogarty, Bongshin Lee, Mark Matthews, Julie A. Kientz
IEEE Pervasive Computing, Volume 16 Issue 1

## Workshops Organized

**2017** O2 **New Frontiers of Quantified Self 3: Exploring Understudied Categories of Users**
Amon Rapp, Federica Cena, Judy Kay, Bob Kummerfeld, Frank Hopfgartner, Till Plumbaum, Jakob Eg Larsen, Daniel A. Epstein, Rúben Gouveia
UbiComp 2017 Workshop

**2016** O1 **New Frontiers of Quantified Self 2: Going Beyond Numbers**
Amon Rapp, Federica Cena, Judy Kay, Bob Kummerfeld, Frank Hopfgartner, Till Plumbaum, Jakob Eg Larsen, Daniel A. Epstein, Rúben Gouveia
UbiComp 2016 Workshop

## Workshop Publications

**2017 W9** **Exploring Opportunities for Storytelling with Everyday Personal Data**
Daniel A. Epstein, James Fogarty, Sean A. Munson
CHI 2017 Workshop (Quantified Data & Social Relationships)

**2017 W8** **Exploring New Design Directions for Menstrual Tracking Technology**
Daniel A. Epstein, Nicole B. Lee, Jennifer H. Kang, Elena Agapie, Jessica Schroeder, Laura R. Pina, James Fogarty, Julie A. Kientz, Sean A. Munson
CHI 2017 Workshop (Hacking Women's Health)

**2015 W7** **Personal Informatics in Everyday Life**
Daniel A. Epstein
UbiComp/ISWC 2015 Doctoral School

**W6** **Wearables of 2025: Designing Personal Informatics at a Broader Audience**
Daniel A. Epstein, Nicole B. Lee, Elizabeth Bales, James Fogarty, Sean A. Munson
CHI 2015 Workshop (Beyond Personal Informatics: Designing for Experiences with Data)

**2014 W5** **Failures in Sharing Personal Data on Social Networking Sites**
Daniel A. Epstein, James Fogarty, Sean A. Munson
UbiComp 2014 Workshop (Disasters in Personal Informatics: The Unpublished Stories of Failure and Lessons Learned)

**W4** **Design Considerations for Socially Sharing Quantified Self**
Daniel A. Epstein, Elizabeth Bales and Sean A. Munson
CHI 2014 Workshop (Beyond Quantified Self: Data for Wellbeing)

**2013 W3** **Improving Personal Informatics Through Social Sharing**
Daniel A. Epstein
UbiComp/ISWC 2013 Doctoral School (Junior Track)

**W2** **Examining Obstacles to Sharing Fine-Grained Personal Activity Data**
Daniel A. Epstein and James Fogarty
CHI 2013 Workshop (Personal Informatics in the Wild: Hacking Habits for Health & Happiness)

**2012 W1** **Multi-Granularity Redundancy in Multi-Core SIMT**
Daniel A. Epstein, Kevin Skadron, and Brett H. Meyer (2012).
DFM&Y 2012 (Workshop on Design for Manufacturability and Yield)

## Posters

**2015 P2** **Personal Informatics in Everyday Life**
Daniel A. Epstein
UbiComp 2015 Doctoral School

**P1** **SIMD Performance and Yield Optimization with Multi-granularity Redundancy**
Daniel A. Epstein, Kevin Skadron, and Brett H. Meyer
DAC 2012 Work-in-Progress

## Teaching Experience

University of Washington

**2016** Teaching Assistant, Advanced Topics in HCI (CSE 510)
Professor: James Fogarty. Aided in course design, project feedback.

**2015** Teaching Assistant, HCI Capstone (CSE 441)
Professor: James Fogarty. Aided in course design, project critiques.

**2014** Head Teaching Assistant, Introduction to HCI (CSE 440)
Professor: James Fogarty. Aided in course design, lecture preparation, project critiques.

**2013-Present** Research mentorship
Organized a Directed Research Group (HCDE 496/596), with Sean Munson from 2013 to 2015. Mentored 19 masters and undergraduate students on projects in personal informatics over 5 quarters. Work from group resulted in C3, C5, C6, W4, with student coauthors on C3, C5, C6.

Individual Students mentored outside Directed Research Groups
Monica Caraway (HCDE M.S., coauthor on C6, first author on J2)
Sol Choi (HCDE B.S.)
Jennifer Kang (CSE & iSchool B.S., coauthor on C9, C11, W8)
King Xia (CSE B.S. honors thesis)
Jennifer Kam (summer research, visiting from Wellsley College)

**2013-2016** Tutor
Data Structures and Algorithms (CSE 373), Data Abstractions (CSE 332),
Software Design & Implementation (CSE 331), Database Systems Internals (CSE 444)

University of Virginia

**2009-2012** Teaching Assistant
Introduction to Programming (CS 1110), Operating Systems (CS 4414),
Game Design (CS 4501), Algorithms (CS 4102), Program and Data Representation (CS 2150)

## Professional Experience

**Summer 2017** Adobe, Research Intern, Creative Intelligence Lab
Mentor: Mira Dontcheva
Designing for storytelling with personal data.

**Summer 2015** FXPAL, Research Intern
Mentors: Daniel Avrahami, Jacob Biehl
Understanding and designing for breaks taken by knowledge workers, published in C8.

**2012-Present** University of Washington, Research Assistant, DUB Group
Advisors: James Fogarty, Sean Munson
Exploring how personal informatics can align with people's everyday experiences.

**2010-2012** University of Virginia, Undergraduate Research Assistant, LAVA Lab
Advisors: Kevin Skadron, Brett Meyer
Increasing manufacturing reliability in single-instruction, multiple-data (SIMD) processors.

**Summer 2011, 2012** Microsoft, Software Development Engineer in Test Intern, Xbox
Wrote web service test framework for issuing game console commands

# Awards, Honors, and Service

**Program Committees**

PervasiveHealth 2017
CHI 2017 Workshop on Quantified Data and Social Relationships
CHI 2016 Late-Breaking Work
HealthWear 2016
UbiComp 2015 Workshop on New Frontiers in Quantified Self

**Reviewing**

CHI 2014-2018
CSCW 2017-2018
UbiComp/IMWUT 2014-2017
DIS 2016-2017
UIST 2017
MobileHCI 2014 & 2015
Additional Journals including TiiS, IEEE Pervasive, and Human-Computer Interaction
Special recognitions for reviewing at DIS 2016, CSCW 2017, CHI 2017, DIS 2017

**Student Volunteering**

UbiComp/ISWC 2017 Student Volunteer Chair
UbiComp/ISWC 2013, 2014, 2016
UIST 2016 Program Committee Meeting
CHI 2013

**Other Service**

DUB Student Coordinator, 2016-2017
DUB Food Coordinator, 2013
University of Washington ACM International Collegiate Programming Contest Coach, 2013-2017

**Awards**

Adobe Research Fellowship Finalist, 2017
Best Paper Award, CHI 2017 (for C11)
Best Paper Honorable Mention, CHI 2017 (for C10)
Best Paper Honorable Mention, CHI 2015 (for C4)
UbiComp 2015 Travel Grant
UbiComp 2013 Travel Grant
2012 Louis T. Rader UVA CS Departmental award for excellence in service
2011 Louis T. Rader UVA CS Departmental award for excellence in teaching

# Invited Talks and Guest Lectures

**2017**

Personal Tracking in Everyday Life
Fitbit, July 2017

Everyday Personal Informatics
Guest Lecture, HCDE 419 (Concepts in HCI), University of Washington, May 2017

**2016**

Crumbs: Lightweight Daily Food Challenges to Promote Engagement and Mindfulness
Computer Science & Engineering Industrial Affiliates, University of Washington, October 2016

Behavior Change and Personal Informatics
Guest Lecture, HCDE 419 (Concepts in HCI), University of Washington, April 2016

Using Personal Data in Everyday Life: Actionable Insights, Self-Representation, and Eliciting Support
International Society for Research on Internet interventions (ISRII) Scientific Meeting, April 2016

Experiment Design and Statistics
Guest Lecture, CSE 510 (Advanced Topics in HCI), University of Washington, January 2016

**2015** A Lived Informatics Model of Personal Informatics
Barriers and Negative Nudges: Exploring Challenges in Food Journaling
Computer Science & Engineering Industrial Affiliates, University of Washington, October 2015

A Lived Informatics Model of Personal Informatics
FXPAL, September 2015

Personal Informatics in Everyday Life
HCI Seminar, Stanford University, September 2015

Receiving Value and Social Support from Personal Informatics Data
University of Maryland, January 2015

**2014** More than Interaction Design: Exposing the Breadth of HCI
Guest Lecture, CS 3205 (HCI in Software Development), University of Virginia, October 2014

Task Analysis
Guest Lecture, CSE 440 (Introduction to HCI), University of Washington, October 2014

**2013** Fine-Grained Sharing of Sensed Physical Activity: A Value Sensitive Approach
Computer Science & Engineering Industrial Affiliates, University of Washington, October 2013

## Selected Press

**2017** Chances Are Your Period App is B.S.
Cosmopolitan (Elizabeth Narins, May 2017)
http://www.cosmopolitan.com/health-fitness/a9598638/period-app-accuracy/

Do Period Tracking Apps Work? They Might Not be as Accurate as You Think
Bustle (Georgina Lawton, May 2017)
https://www.bustle.com/p/do-period-tracking-apps-work-they-might-not-be-as-accurate-as-you-think-55743

The Awful Pinkness of Period Apps
The Atlantic (Sarah Zhang, May 2017)
https://www.theatlantic.com/health/archive/2017/05/period-apps-pink/525207/

How to Choose a Period Tracking App that Actually Works for You
Health.com (Amanda MacMillan, May 2017)
http://www.health.com/sexual-health/period-tracker-app-complaints

Period tracking apps often 'disappoint'
Gynecology and Technology (May 2017)
http://www.figo.org/news/period-tracking-apps-often-'disappoint'-0015561

Period-Tracking Apps get Failing Grade: They're Not Accurate. And They're Way Too Pink.
STAT News (Usha Lee McFarling, May 2017)
https://www.statnews.com/2017/05/02/period-tracking-apps-flaws/

**2016** From the Community: What Happens When You Take Off Your Fitness Tracker?
Chicago Tribune (Advocate Christ Medical Center, September 2016)
http://www.chicagotribune.com/suburbs/daily-southtown/community/chi-ugc-article-what-happens-when-you-take-off-your-fitness-t-2016-09-16-story.html

This is What Happens When You Stop Using Your Fitness Tracker
Men's Fitness (Brittany Smith, September 2016)
http://www.mensfitness.com/life/gearandtech/what-happens-when-you-stop-using-your-fitness-tracker

From Guilt to Relief: The Emotional Impact of Giving Up Activity Tracking
Yahoo! News, Digital Trends (September 2016)
https://www.yahoo.com/news/guilt-relief-emotional-impact-giving-070948996.html

Why You Shouldn't Feel Guilty About Ditching Your Fitbit
Time.com (Amanda MacMillan, September 2016)
http://time.com/4500481/fitbit-fitness-tracker/

Feel Guilty About Ditching Your Fitbit? You're Not Alone
Health.com (Amanda MacMillan, September 2016)
http://www.health.com/fitness/fitbit-use-guilt

New Reasons Why You Should Keep a Food Journal
Wall Street Journal (Sumathi Reddy, May 2016)
http://www.wsj.com/articles/new-reasons-why-you-should-keep-a-food-journal-1463419285

**2015** Food Journaling not as Easy or Effective as it Should Be: Study
Consumer Affairs (Christopher Maynard, April 2015)
https://www.consumeraffairs.com/news/food-journaling-not-as-easy-or-effective-as-it-should-be-study-041715.html

Why People Ditch Food Journal Apps
New York Magazine (Jesse Singal, April 2015)
http://nymag.com/scienceofus/2015/04/why-people-ditch-food-journal-apps.html

**2014** UW Study Finds Pros and Cons of Fitness Gadgets
King 5 News (July 2014)

# References

**James Fogarty**
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**Sean A. Munson**
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**Julie A. Kientz**
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jkientz@uw.edu
**Mira Dontcheva**
Senior Research Scientist, Creative Intelligence Lab, Adobe Research
mirad@adobe.com