

Jessica Schroeder
PhD Candidate

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SUMMARY

Computer Science PhD candidate specializing in human-computer interaction (HCI), with extensive experience in conducting *formative studies* to identify needs and opportunities; *iterative design and development* of novel methods and tools to support those needs; and *evaluations* to examine usage and develop design implications for future tools.

PROFESSIONAL EXPERIENCE

2014 - Present

Research Assistant, University of Washington

Investigated supporting people and their health providers in collecting, analyzing, and interpreting patient-generated data to meet personalized health goals in multiple health contexts. Built interactive, exploratory visualizations to help people identify personal IBS triggers. Conducted surveys and interviews to characterize needs and opportunities in migraine tracking. Proposed goal-directed self-tracking as a general framework for self-tracking data. Collaborated with health providers in the design and evaluation of novel prototype health apps. Research resulted in related grants from the NSF (\$500k) and the NIH (\$1.5M). More detailed descriptions available on my [personal website](#).

Summer 2017

Research Intern, Microsoft Research

Conducted a feasibility study to investigate how a mobile app can support behavioral therapy. Designed and analyzed surveys to: 1) characterize significant positive changes in anxiety, depression, and coping skill use; 2) develop a theoretical model to describe how the app supported these improvements; and 3) distill design implications for future tools. Identified opportunities for machine learning techniques to provide personalized and context-aware suggestions to help people identify feasible and useful positive coping skills.

2013 - 2014

Project Manager, Harvey Mudd Clinic

Led development of a web app to provide personalized vacation recommendations for Expedia.

2013

Undergraduate Research Assistant, Carnegie Mellon HCII

Investigated augmentations of a chronic illness forum to help people find credible information.

2012

Undergraduate Research Assistant, Pomona College

Developed a web app to identify fusion genes, which have implications in cancer.

EDUCATION

2014 - Present

University of Washington, Seattle, WA

PhD, Computer Science & Engineering. GPA: 3.9

M.S. earned 12/2016

Dissertation: Goal-Directed Self-Tracking in the Management of Chronic Health Conditions

Advisors: James Fogarty, Sean Munson

2010 - 2014

Pomona College, Claremont, CA

B.A., Computer Science. GPA: 3.9

AWARDS & HONORS

2017, 2018

Best Paper Award (CHI 2017) and Honorable Mentions (CHI 2017, DIS 2018)

2016

NSF Graduate Research Fellowship Program Awardee

2014

Marilyn Fries Endowed Regental Fellowship Recipient

2014

ARCS Foundation Fellow

2014

Harvey Mudd Computer Science Clinic Team Award Winner

2013

DREU-CRAW Participant

2013

Grace Hopper Scholarship Recipient

2010 - 2013

Pomona College Scholar

SKILLS

<i>User Research</i>	Semi-structured interviews, surveys, field studies, observation, contextual inquiry.
<i>Data Analysis</i>	Qualitative data analysis (e.g., coding, thematic analysis, affinity diagramming); Quantitative data analysis (e.g., R, Python, Pandas, NumPy, SciPy, Matplotlib, Seaborn).
<i>Prototyping</i>	Prototypes, mobile and web app development (e.g., Angular, Ionic, D3.js).
<i>Communication/Leadership</i>	Project management, scientific & technical writing, presentations.

TEACHING, SERVICE, AND LEADERSHIP

<i>Reviewer</i>	CHI 2017-2020; CSCW 2018-2019; DIS 2018-2019; IMWUT 2019.
<i>Teaching Assistant</i>	Designed and graded assignments, critiqued projects, and advised UW graduate students in <i>CSE 510: Advanced Topics in HCI</i> (Winter 2018, Fall 2018).
<i>HCI Seminar Lead</i>	Led improvements to the Computer Science department's weekly HCI seminar and organized quarterly themes, presentations, and feedback (January 2017—June 2018).
<i>UW CSE Graduate Admissions Volunteer</i>	Coordinated one-on-ones with faculty and current graduate students and organized social activity (Winter 2018); reviewed graduate student applications (Fall 2016).
<i>Orientation Leader</i>	Organized orientation for the new Computer Science graduate students (Fall 2016).
<i>Writing Fellow</i>	Worked with Pomona students to improve their writing (Fall 2011—Spring 2014). Senior Science Fellow for the 2013/2014 academic year.

SELECT PUBLICATIONS

Full publication lists available on my [personal website](#) and my [Google Scholar Page](#).

J Schroeder, R Karkar, N Murinova, J Fogarty, SA Munson. [Examining Opportunities for Goal-Directed Self-Tracking to Support Chronic Condition Management](#). *UbiComp 2020*.

CF Chung, Q Wang, **J Schroeder**, A Cole, J Zia, J Fogarty, SA Munson. [Identifying and Planning for Individualized Change: Patient-Provider Collaboration Using Lightweight Food Diaries in Healthy Eating and Irritable Bowel Syndrome](#). *UbiComp 2019*.

J Schroeder, R Karkar, J Fogarty, JA Kientz, SA Munson, M Kay. [A Patient-Centered Proposal for Bayesian Analysis of Self-Experiments for Health](#). *JHIR 2018*.

J Schroeder, CF Chung, DA Epstein, R Karkar, A Parsons, N Murinova, J Fogarty, SA Munson. [Examining Self-Tracking by People with Migraine: Goals, Needs, and Opportunities in a Chronic Health Condition](#). *DIS 2018*. Best Paper Honorable Mention.

J Schroeder, C Wilks, K Rowan, A Toledo, A Paradiso, M Czerwinski, G Mark, MM Linehan. [Pocket Skills: A Conversational Mobile Web App To Support Dialectical Behavioral Therapy](#). *CHI 2018*.

R Karkar, **J Schroeder**, D Epstein, L Pina, J Scofield, J Fogarty, JA Kientz, SA Munson, R Vilaradaga, J Zia. [TummyTrials: A Feasibility Study of Using Self-Experimentation to Detect Individualized Food Triggers](#). *CHI 2017*. Best Paper Honorable Mention.

CF Chung, E Agapie, **J Schroeder**, S Mishra, J Fogarty, S Munson. [When Personal Tracking Becomes Social: Examining the Use of Instagram for Healthy Eating](#). *CHI 2017*.

D Epstein, N Lee, J Kang, E Agapie, **J Schroeder**, L Pina, J Fogarty, JA Kientz, SA Munson. [Examining Menstrual Tracking to Inform the Design of Personal Informatics Tools](#). *CHI 2017*. Best Paper Awardee.

J Schroeder, J Hoffswell, CF Chung, J Fogarty, S Munson, J Zia. [Supporting Patient-Provider Collaboration to Identify Individual Triggers using Food and Symptom Journals](#). *CSCW 2017*.

SELECT WORKSHOP PUBLICATIONS

[Personalizing Health Technologies to Support Patient and Provider Goals](#). *CSCW 2019 Workshop on Identifying Challenges and Opportunities in Human-AI Collaboration in Healthcare*.

[Hypothesis Formation and Hypothesis Testing: Design Challenges in Self-Experimentation](#). *CHI 2017 Workshop on Digital Health & Self-Experimentation*.