

CV | ANNE SPENCER ROSS

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EDUCATION

- 6/2021
(expected) **Ph.D. Candidate**, Computer Science & Engineering, University of Washington
Advisors: James Fogarty and Jacob O. Wobbrock
- 2019 **M.S.**, Computer Science & Engineering, University of Washington
- 2014 **B.S.**, Computer Science, Colorado State University

RESEARCH EXPERIENCE


- 2015-*present* Graduate Researcher | **University of Washington**
DUB GROUP & ACCESSIBLE COMPUTING EXPERIENCES LAB
Advisors: James Fogarty, Jacob O. Wobbrock
Use large-scale and multi-factor approaches to characterize and improve mobile application accessibility for people with disabilities.
- 2019 Graduate Research Intern | **Google**, Mountain View
ACCESSIBILITY DEVELOPER INFRASTRUCTURE TEAM, Host: Casey Burkhardt
Extended API on automated app accessibility test framework. Prototyped and tested tool for gathering human annotation of app accessibility test results.
- 2018 Graduate Research Intern | **Microsoft Research**, Redmond
ABILITY AND ENABLE GROUPS, Mentors: Ed Cutrell, Meredith Ringel Morris
Prototyped and tested an audio-based, virtual navigation app for people with low vision.
- 2017 Graduate Researcher | **University of Washington**, Seattle
ARK LAB (NLP RESEARCH), Advisor: Noah Smith
Designed and conducted a user study investigating collaborative creative writing between people and AI agents.
- 2016-18 Graduate Researcher | **University of Washington**, Seattle
HUMAN-CENTERED DESIGN AND ENGINEERING, Advisor: Sean Munson
Designed and conducted interviews with neurodiverse students to explore technological support in teamwork settings.
- 2013-14 Undergraduate Researcher | **Colorado State University**, Fort Collins
HCI & AI LABS, Advisors: Jamie Ruiz, Adele Howe
Designed, implemented, and tested a personalized web search assistant.
Identified individuals and their activities using a mobile phone accelerometer and gyroscope.


- 2013 Undergraduate Researcher | **Naval Postgraduate School**, Monterey
Mentor: Craig Martell
Applied Naïve Bayesian classifiers to tweets to characterize Twitter users
- 2012 Undergraduate Researcher | **University of Maryland, Baltimore County**
Mentor: Nagaraj K. Neerchal
Performed statistical analyses and developed visualizations of water quality data.
- 2011 Undergraduate Intern | **University of Colorado Denver**
Mentor: Sharon K. Hunter
Produced instructional films on research methods being used in a psychiatric lab.

AWARDS & HONORS

- 2020 Finalist, NCWIT Collegiate Award
- 2019 Special Recognition for Outstanding Review,
ACM Conference on Human Factors in Computing Systems (CHI) 2019
- 2018 Best Paper Nominee (Top 5%), ASSETS 2018
- 2017 Best Paper Nominee (Top 5%), ASSETS 2017
- 2017 Graduate Research Fellowship, Nation Science Foundation
- 2016 2nd Place, ACM Graduate Student Research Competition, Grace Hopper Celebration
- 2015 Wilma Bradley Endowed Fellowship in Computer Science & Engineering,
University of Washington
- 2014 Natural Sciences Undergraduate Fellowship, Colorado State University
- 2013, 2014 Frances Allen Scholarship in Computer Science, Colorado State University
- 2012, 2013 Ram Transfer Scholarship for Academic Achievement, Colorado State University

PUBLICATIONS

- 2020 P10 An Epidemiology-Inspired Large-Scale Analysis of Android App Accessibility.
Anne Spencer Ross, Xiaoyi Zhang, Jacob O. Wobbrock, James Fogarty. *ACM Transactions on Accessible Computing (TACCESS)*, April 2020, Article No. 4.
- 2018 P9  Examining Image-Based Button Labeling for Accessibility in Android Apps through Large-Scale Analysis.
Anne Spencer Ross, Xiaoyi Zhang, Jacob O. Wobbrock, James Fogarty. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2018)*.
Best Paper Nominee (Top 5%)
- P8 Robust Annotation of Mobile Application Interfaces in Methods for Accessibility Repair.
Xiaoyi Zhang, Anne Spencer Ross, James Fogarty.
ACM Symposium on User Interface Software and Technology (UIST 2018).

- P7 Values, Identity, and Social Translucence: Neurodiverse Student Teams in Higher Education. Annuska Zolyomi, Anne Spencer Ross, Arpita Bhattacharya, Lauren Milne, Sean Munson. *ACM Conference on Human Factors in Computing Systems (CHI 2018)*.
- P6 Creative Writing with a Machine in the Loop: Case Studies on Slogans and Stories. Elizabeth Clark, Anne Spencer Ross, Chenhao Tan, Yangfeng Ji, Noah Smith. *ACM Conference on Intelligent User Interfaces (IUI 2018)*.
- 2017 P5  Epidemiology as a Framework for Large-Scale Mobile Application Accessibility Assessment. Anne Spencer Ross, Xiaoyi Zhang, Jacob O. Wobbrock, James Fogarty. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2017)*. Best Paper Nominee (Top 5%).
- P4 Interaction Proxies for Runtime Repair and Enhancement of Mobile Application Accessibility. Xiaoyi Zhang, Anne Spencer Ross, Anat Caspi, James Fogarty, Jacob O. Wobbrock. *ACM Conference on Human Factors in Computing Systems (CHI 2017)*.
- 2016 P3 MEGARes: an Antimicrobial Resistance Database for High Throughput Sequencing. Steven M. Lakin, Chris Dean, Noelle R. Noyes, Adam Dettenwanger, Anne Spencer Ross, Enrique Doster, Pablo Rovira, Zaid Abdo, Kenneth L. Jones, Jaime Ruiz, Keith E. Belk, Paul S. Morley, Christina Boucher. *Nucleic Acids Research*, Vol. 45, Issue D1, 4 January 2017, pp. D574–D580.
- 2014 P2 Tweet!—and I Can Tell How Many Followers You Have. Christine Klotz, Annie Ross, Elizabeth Clark, Craig Martell. *Recent Advances in Information and Communication Technology*, Vol. 265, pp. 245-253.
- 2013 P1 P50 Sensory Gating in Infants. Anne Spencer Ross, Sharon Kay Hunter, Mark A. Groth, Randal Glenn Ross. *Journal of Visualized Experiments*, 50065.


INVITED TALKS

- 2020 A Large-Scale, Multi-Factor Approach to Mobile Application Accessibility
Anne Spencer Ross
IBM, Accessibility Team
- 2019 A Large-Scale Analysis of Mobile App Accessibility
Anne Spencer Ross
Google, Accessibility Engineering Team
- 2017 Interaction Proxies for Runtime Repair and Enhancement of Mobile Application Accessibility
Xiaoyi Zhang, Anne Spencer Ross, James Fogarty, Jacob O. Wobbrock
Microsoft, Accessibility Team

WORKSHOPS

- 2020 W3 A Disability Studies Critique of Developer Tools for App Accessibility
[Anne Spencer Ross](#)
Workshop on Critical Disability Studies (CHI 2020)
(Canceled due to COVID-19 pandemic)
- 2019 W2 Use Cases and Impact of Audio-Based Virtual Exploration
[Anne Spencer Ross](#), Ed Cutrell, Alex Fiannaca, Melanie Kneisel, Meredith Ringel Morris
Blind Navigation Workshop (CHI 2019)
- 2018 W1 An Epidemiology-Inspired, Large-Scale Analysis of Mobile App Accessibility
[Anne Spencer Ross](#)
ASSETS Doctoral Consortium (ASSETS 2018)

POSTERS AND PRESENTATIONS

- 2019 An Epidemiology-Inspired, Large-Scale Analysis of Mobile App Accessibility
[Anne Spencer Ross](#)
iResearch Fair, Information School, University of Washington
- 2018 An Epidemiology-Inspired, Large-Scale Analysis of Mobile App Accessibility
[Anne Spencer Ross](#)
Research Day, Computer Science & Engineering, University of Washington
- 2018 An Epidemiology-Inspired, Large-Scale Analysis of Mobile App Accessibility
[Anne Spencer Ross](#), Xiaoyi Zhang, James Fogarty, Jacob O. Wobbrock
Research Colloquium, Computer Science & Engineering, University of Washington
- 2017 Value Sensitive Design for Neurodiverse Teams in Higher Education
Annuska Zolyomi, [Anne Spencer Ross](#), Arpita Bhattacharya, Lauren Milne, Sean Munson
ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2017)
- 2017 Epidemiology as a Framework for Large-Scale Mobile Application Accessibility Assessment
[Anne Spencer Ross](#)
Research Day, Computer Science & Engineering, University of Washington
- 2016 Supporting Equity in Smartphone Accessibility with Third-Party Repair
[Anne Spencer Ross](#)
Scholars' Studio, University of Washington
- 2016  Enhancing the Accessibility of Mobile Applications
[Anne Spencer Ross](#)
Grace Hopper Celebration of Women in Computing
2nd Place, ACM Student Research Competition, Graduate Student Category

TEACHING EXPERIENCE

Teaching Assistant, University of Washington

Introduction to Human Computer Interaction

Undergraduate Course (Winter 2019)

Advanced Topics in Human-Computer Interaction

Graduate Course (Spring 2017)

Instructor, University of Washington

Accessibility Seminar

(Winter, Spring, Fall 2020)

Research Lead, OurCS@UW+AccessComputing Workshop, University of Washington

Methods for Researching Technology with and For Others: Smartphone App Accessibility

Undergraduate Workshop (Spring 2019)

SERVICE

REVIEWING

Program Committee, Reviewer, *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*; 2020

Reviewer, *ACM Conference on Human Factors in Computing Systems (CHI)*; 2019, 2020

UNIVERSITY SERVICE

DUB Student Coordinator (DUB is a multi-unit HCI group at the University of Washington); 2018-2020

PhD Admission Committee (as reviewer), *Computer Science & Engineering*; 2019

Interactive Systems Seminar Student Coordinator, *Computer Science & Engineering*; Fall 2017

CHI Paper Swap Coordinator, *DUB*; 2017

HCI Student Skill Share Coordinator, *Computer Science & Engineering*; 2017

PhD Mentorship Program (mentor and program coordinator), *Computer Science & Engineering*; 2016

New PhD Student Orientation Coordinator, *Computer Science & Engineering*; 2016

PROFESSIONAL ORGANIZATION SERVICE

Accessibility Training Lead for Student Volunteers, *ACM Conference on Human Factors in Computing Systems (CHI)*; 2019, 2020

Student Volunteer, *ACM Conference on Human Factors in Computing Systems (CHI)*; 2016, 2017, 2018

COMMUNITY SERVICE

Pantry Lead, *Neighbors Feeding Neighbors COVID-19 Community Foodbank*; 2020

Smartphone Tutor for Individual with Low Vision; 2016-2018

MENTORING

Lauren Kim, DUB Research Experience for Undergraduates; Summer 2020

Manisha Tirumalai, DUB Research Experience for Undergraduates; Summer 2020

Jinyoung Oh, ACM-W Mentorship Program; 2017

Alison Ng, ACM-W Mentorship Program; 2017

Annie Hanson, Women in Science and Engineering Bridge Program; Summer 2017

Maryam Bahadori-Nejad, Women in Science and Engineering Bridge Program; Summer 2017

Ishaan Chainani, High School Research Intern; Summer 2017