

# ANNE SPENCER ROSS

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I am a PhD student in the Paul G. Allen School of Computer Science & Engineering at the University of Washington. My broad interest is in Human-Computer Interaction. I am passionate about enabling diverse groups of people to access, interact with, and communicate information through technology. I am currently working with James Fogarty and Jacob O. Wobbrock on making Android applications more accessible to people with disabilities.

## EDUCATION

University of Washington, Seattle, WA	
<b>Ph.D. Student, Computer Science &amp; Engineering</b> , GPA: 3.92	2015 - present
Focused in Human-Computer Interaction and Accessibility	
Colorado State University, Fort Collins, CO	
<b>B.S. in Computer Science</b> , Manga Cum Laude with Honors, GPA: 3.99	2012-2014
Thesis: <i>Examination of the Dedicated Research Assistant (DESA) System Usability and Effectiveness</i>	
University of California Santa Cruz, Santa Cruz, CA	
<b>Major: Film Production</b> , Minor: Statistics, GPA: 3.95	2010-2012

## AWARDS AND SERVICE

Best Paper Honorable Mention, <i>ASSETS 2017</i>	2017
Graduate Research Fellowship, <i>National Science Foundation</i>	2017
2 <sup>nd</sup> Place, ACM Graduate Research Competition, <i>Grace Hopper Celebration of Women in Computing</i>	2016
Honorable Mention, Graduate Research Fellowship, <i>National Science Foundation</i>	2016
Wilma Bradley Endowed Fellowship in Computer Science & Engineering, <i>Univ. of Washington</i>	2015 - 2016
Natural Sciences Undergraduate Fellowship, <i>Colorado State Univ.</i>	2014
Frances Allen Scholarship in Computer Science, awarded 2 years, <i>Colorado State Univ.</i>	2013 - 2014
Dean's Honors: Fall, Spring, <i>Colorado State Univ.</i>	2012-2013
Ram Transfer Scholarship for Academic Achievement, awarded 2 years, <i>Colorado State Univ.</i>	2012-2014
Dean's Honors: Fall, Winter, and Spring, <i>Univ. of California Santa Cruz</i>	2010 – 2012

## SELECT PUBLICATIONS

<i>Examining Image-Based Button Labeling for Accessibility in Android Apps through Large-Scale Analysis</i>	2018
<u>Anne Spencer Ross</u> , Xiaoyi Zhang, Jacob O. Wobbrock , James Fogarty	
TO APPEAR AT ASSETS 2018	
<i>Values, Identity, and Social Translucence: Neurodiverse Student Teams in Higher Education</i>	2018
Annuska Zolyomi, <u>Anne Spencer Ross</u> , Arpita Bhattacharya, Lauren Milne, Sean Munson	
CHI 2018	
<i>Creative Writing with a Machine in the Loop: Case Studies on Slogans and Stories</i>	2018
Elizabeth Clark, <u>Anne Spencer Ross</u> , Chenhao Tan, Yangfeng Ji, Noah Smith	
IUI 2018	
<i>Epidemiology as a Framework for Large-Scale Mobile Application Accessibility Assessment</i>	2017
<u>Anne Spencer Ross</u> , Xiaoyi Zhang, James Fogarty, Jacob O. Wobbrock	
ASSETS 2017, BEST PAPER HONORABLE MENTION	
<i>Interaction Proxies for Runtime Repair and Enhancement of Mobile Application Accessibility</i>	2017
Xiaoyi Zhang, <u>Anne Spencer Ross</u> , Anat Caspi, James Fogarty, Jacob O. Wobbrock	
CHI 2017	

## PROFESSIONAL EXPERIENCE

University of Washington	
<b>Research Assistant</b>	
DUB GROUP	
Advisors: James Fogarty, Jacob O. Wobbrock	2015 – present
Explore ways to conceptualize, assess, and repair smartphone accessibility for people with disabilities	
Mentor: Sean Munson	2016 – present

# ANNE SPENCER ROSS

Explore how technology can support higher education students with Autism in teamwork settings

ARK LAB

Mentor: Noah Smith

2017

Explore how working with a machine in the loop on creative writing may help creativity

Colorado State University, HCI and AI Labs

**Undergraduate Research Assistant**

Advisors: Jamie Ruiz, Adele Howe

2013 – 2014

Designed and implemented a personalized web search assistant and conducted usability studies

Explored using a mobile phone accelerometer and gyroscope to identify individuals and their activities

Naval Postgraduate School

**Naval Research Enterprise Internship Program Intern**

Summer 2013

Investigated using Naïve Bayes classifiers to classify characteristics of Twitter users based on tweets

University of Maryland, Baltimore County

**Research Intern at REU Site: Interdisciplinary Program in High Performance Computing**

Summer 2012

Developed visualizations for and determined appropriate statistical analysis of water quality data

University of Colorado Denver

**Summer Education and Training Intern**

Summer 2011

Produced instructional films on research methods being used in a psychiatric lab

## TEACHING EXPERIENCE

University of Washington, Seattle, WA

**Teaching Assistant – “Advanced Topics in HCI” (CSE 510)**

Spring 2017

Professor: James Fogarty. Aided in project feedback and assignment design.

## PROFESSIONAL AND PERSONAL MENTORING

**Women in Science and Engineering Bridge REU Mentor**

Summer 2017

Worked with two students on a summer research project, resulting in a poster and oral presentation

Annie Hanson (incoming 1<sup>st</sup> year)

Maryam Bahadori-Nejad (incoming 1<sup>st</sup> year)

**Individual Students Mentored**

Summer 2017

Ishaan Chainani (summer high school research intern)

**Undergraduate Mentor**

2017 – present

Through the ACM-W, I mentor two women undergraduate computer science students; I answer questions about school and technology careers

**New Graduate Student Mentor**

2016

Mentored four incoming PhD graduate students during their first year

**Smartphone Tutor**

2016 – present

Assist an individual with low-vision with learning to use a smartphone

**Computer Tutor**

2012 – 2014

Assisted an individual learn basic computer skills

## SERVICE

CHI Student Volunteer

2017

Computer Science & Engineering HCI Student Skill Share Coordinator

2017

CHI Student Volunteer

2016

Computer Science& Engineering New Graduate Students Orientation Coordinator

2016

Computer Science & Engineering New Graduate Students Mentoring Coordinator

2016

## SELECT INVITED PRESENTATIONS

*Epidemiology as a Framework for Large-Scale Mobile Application Accessibility Assessment*

2017

Anne Spencer Ross

COMPUTER SCIENCE & ENGINEERING RESEARCH DAY, UNIV. OF WASHINGTON

## ANNE SPENCER ROSS

*Supporting Equity in Smartphone Accessibility with Third-Party Repair Tools*

2016

Anne Spencer Ross

SCHOLAR'S STUDIO, UNIV. OF WASHINGTON

### ADDITIONAL PUBLICATIONS

*Value Sensitive Design for Neurodiverse Teams in Higher Education*

2017

Annuska Zolyomi, Anne Spencer Ross, Arpita Bhattacharya, Lauren Milne, Sean Munson

ASSETS 2017

*MEGARes: an Antimicrobial Resistance Database for High Throughput Sequencing*

2016

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

*Tweet!—and I Can Tell How Many Followers You Have*

2014

Christine Klotz, Anne Ross, Elizabeth Clark, Craig Martell

RECENT ADVANCES IN INFORMATION AND COMMUNICATION TECHNOLOGY, VOL. 265, PP. 245-253

*P50 Sensory Gating in Infants*

2013

Anne Spencer Ross, Sharon Kay Hunter, Mark A Groth, Randal Glenn Ross

JOURNAL OF VISUALIZED EXPERIMENTS, 50065

*Assessment of Statistical Methods for Water Quality Monitoring in Maryland's Tidal Waterways*

2013

Rosemary K. Le, Christopher V. Rackauckas, Anne S. Ross, Nehemias Ulloa

SIAM UNDERGRADUATE RESEARCH ONLINE, VOL. 6

### ADDITIONAL POSTERS AND PRESENTATIONS

*Supporting Equity in Smartphone Accessibility with Third-Party Repair Tools*

2016

Anne Spencer Ross

ACM STUDENT RESEARCH COMPETITION, GRACE HOPPER CELEBRATION, AWARDED 2<sup>ND</sup> PLACE, [POSTER, PRESENTATION]

*Using Bayesian Statistics on Twitter Feeds to Classify Twitter Users*

2014

Anne Ross, Elizabeth Clark, Christina Klotz, Craig Martell

CELEBRATE UNDERGRADUATE RESEARCH AND CREATIVITY SHOWCASE, COLORADO STATE UNIV. [POSTER]

*Using Bayesian Statistics on Twitter Feeds to Classify Twitter User*

2014

Anne Ross, Elizabeth Clark, Christina Klotz, Craig Martell

AMERICAN MATHEMATICAL ASSOCIATION'S SECTIONAL MEETING, [PRESENTATION]

*Water Quality Monitoring in the Chesapeake Bay*

2013

Anne S. Ross, Rosemary K. Le, Christopher V. Rackauckas, Nehemias Ulloa, Sai Popuri,

Nagaraj Neerchal, Brian Smith

CELEBRATE UNDERGRADUATE RESEARCH AND CREATIVITY SHOWCASE, COLORADO STATE UNIV. [POSTER]

*A Powerful New Tool for Visualizing Water and Habitat Quality Data*

2012

Brian Smith, Rosemary K. Le, Christopher V. Rackauckas, Anne S. Ross, Nehemias Ulloa,

Sai Popuri, Nagaraj Neerchal

MARYLAND WATER MONITORING COUNCIL'S ANNUAL CONFERENCE [POSTER]

*Visualization and Analysis Tool for Water Quality Monitoring in the Chesapeake Bay*

2012

Anne S. Ross, Rosemary K. Le, Christopher V. Rackauckas, Nehemias Ulloa, Sai Popuri,

Nagaraj Neerchal, Brian Smith

ROCKY MOUNTAIN CELEBRATION OF WOMEN IN COMPUTING [POSTER]

*A Powerful New Tool for Visualizing Water and Habitat Quality Data*

2012

Brian Smith, Rosemary K. Le, Christopher V. Rackauckas, Anne S. Ross, Nehemias Ulloa,

Sai Popuri, Nagaraj Neerchal

ATLANTIC ESTUARINE RESEARCH SOCIETY FALL MEETING [POSTER]

**ANNE SPENCER ROSS**

*Water Quality Monitoring of Maryland's Tidal Waterways*

2012

Anne S. Ross, Rosemary K. Le, Christopher V. Rackauckas, Nehemias Ulloa, Sai Popuri,  
Nagaraj Neerchal, Brian Smith

SUMMER UNDERGRADUATE RESEARCH FEST [POSTER]

*Using Video to Teach Research Methods*

2011

Anne Spencer Ross, Mark A Groth, Sharon Kay Hunter, Ali Newton, Kim Muhlhauser,  
Elizabeth Calvin, Randal Glenn Ross

CONTE CENTER SUMMER RETREAT, AWARDED TOP POSTER [POSTER]

*Chimeric Animal Stroop Task for Young Children*

2011

Anne Spencer Ross, Mark A Groth, Sharon Kay Hunter, Kim Muhlhauser, Elizabeth Calvin, Randal Glenn Ross  
DEVELOPMENTAL PSYCHIATRY RESEARCH LAB'S WEBSITE, UNIV. OF COLORADO DENVER [INSTRUCTIONAL VIDEO]