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HUMAN CENTERED DESIGN & ENGINEERING

UNIVERSITY of WASHINGTON



















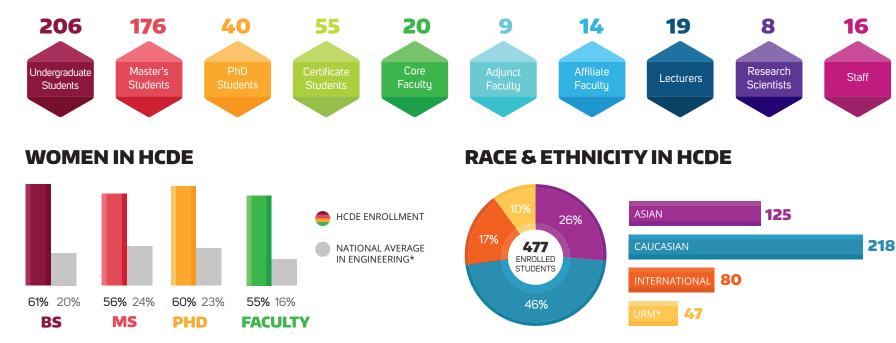






# **OUR PEOPLE**

Demographic data from the 2015-2016 academic year in the Department of Human Centered Design & Engineering



\* Source: National Science Foundation, National Center for Science and Engineering Statistics. Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017. \*URM = Federally recognized underrepresented minority populations (African American, American Indian/Alaska Native, Hawaiian/Pacific Islander and Latino).

# **STUDENT & FACULTY BACKGROUNDS**

HCDE is an interdisciplinary community that brings together faculty and students from a variety of backgrounds. The most common HCDE backgrounds fall within:

- SOCIAL SCIENCES
- OTHER ENGINEERING DISCIPLINES
- ART & DESIGN
- INFORMATION & COMMUNICATION



# **DEGREES AWARDED IN 2016**



# **ALUMNI UPDATES**

We asked recent graduates across our degree programs where they have gone since graduating, and how HCDE helped them get there



**LIZ LINGSHUANG CHEN** MS, 2016 UX Designer Chef Software Seattle, WA

HCDE is a great program to hone the skills in design thinking and research. Completing an internship during the summer helped me explore my career opportunities, and having classes at night enabled me to continue the internship during the fall quarter.





**KARAN GUPTA** MS, 2016 UX Designer GoPro San Francisco, CA

A senior designer from GoPro had come for a talk for the HCDE Seminar Series. I met her for coffee after the talk and showed her my work. She really



liked it, went back, got me an interview setup and that's how I got my job! HCDE is a great place to network and make good connections.



**TERRENCE DUENAS** BS, 2015 UX/IX Designer Insight Global (HP) Boise, ID

My current employer found me through LinkedIn. Most notably, they were impressed with the kinds of projects I worked on while in HCDE and felt I was perfect for the position they were looking to fill with HP. In my interview with HP, they were really impressed with my focus on design and prototyping. Really, it wasn't so much a specific HCDE skill, rather it was everything HCDE had me involved in that enabled me to get this job—and I'm loving it!



**JENNIFER KUMURA** BS, 2015 Interaction Designer GE Digital San Ramon, CA

HCDE has opened my eyes to the concept of Design Thinking and the Design Process as a whole and has helped me develop a strong belief—that the true value of a solution is extracted directly from how it was crafted, designed, and communicated in respect to the end-user. Understanding the ins and outs of



the Design Process is a powerful tool HCDE has provided me and has really been a key driver in landing my role as a UX Interaction Designer.



**DEREK LEE** BS, 2016 Business Technology Analyst Deloitte Seattle, WA

HCDE gave me access to both a solid technical background, and a deep focus on UX. That, with my business background, made me a strong candidate for technology consulting. I serve in a similar role to



tumblr

that of my time in HCDE—understanding the business impact of technology and UX, and being able to translate that into strategic and operational goals.

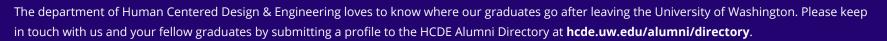


HUNTER MASK BS, 2016 iOS Engineer Tumblr New York, NY

My company places a heavy emphasis on UX and user-centered design throughout the organization. Although my current role is in

mobile development, the human-centered principles and skill set I gained from HCDE helped me to stand out from other candidates for my position. Today, these skills continue to be instrumental in defining and building experiences that fit the unique needs of our user base.

# **STAY IN TOUCH WITH HCDE**





## **GORDON PATTERSON**

MS, 2016 UX Designer Microsoft Bellevue, WA

I found my current job in the HCDE Jobs

Database during my last quarter of the program. I was able to directly email my manager with my



resume and portfolio and he reached back out for an interview. I wouldn't have this job if it wasn't for HCDE.



### **JENNIFER ROBBINS**

UCD Certificate, 2016 User Researcher User Research International Redmond, WA

PHOTO: HILLING DESIGN

I was able to transition to a new career in user research thanks to the UCD Certificate program. The high-caliber instruction was complemented by the opportunity to gain



hands-on experience with local employers. In addition, networking with fellow students and instructors and the job fair that was held during winter quarter were invaluable for learning about opportunities in the field.

# **INTERNSHIP ADVENTURES**

HCDE PhD students Lucas Colusso and Kerem Özcan share their experiences working at Facebook as User Experience Research Interns

For students looking to break into careers in industry, internships can be a key way to learn outside the classroom, grow professional networks, and build a portfolio of project-based work experience.

Lucas Colusso and Kerem Özcan are Ph.D. students in the department of Human Centered Design & Engineering with backgrounds in Graphic Design and Industrial Design, respectively. In Summer 2016, Colusso and Özcan left Seattle for the San Francisco Bay Area to join Facebook as User Experience Research interns.

HCDE: Tell us what you worked on as Facebook User Research Interns?

LC: I was on a team working with Dynamic Ads. At Facebook, advertisers upload a catalog of multiple products, and Facebook helps to match the right products to the most highintent audiences. Through my research we identified opportunities to improve the process for advertisers. KÖ: I worked on the Facebook Marketplace team. Facebook marketplace consists of a craigslist-style person-to-person sales, groups for buying and selling, and businessto-consumer pages where sellers host shops on facebook. I focused on the latter, and was working to make the shopping experience better for the businesses and the people doing shopping. I would oversee how they used certain features, and study their expectations and attitudes toward shopping on facebook.

HCDE: What was something unexpected or surprising about your experience?

LC: When you're working as an intern at Facebook, you don't feel like an intern in the typical sense.

KÖ: I second that completely. On my team, I was the only qualitative researcher at the time, so I was expected to do the same kind of work as a researcher who had been at the company for quite some time. I was responsible for products that were out in the world at the end of my three month assignment.

LC: I'd say Facebook is a very human-centered company to work for. It was clear that they consider interns as valuable members of the



Lucas Colusso and Kerem Özcan pose for a souvenir photo at Facebook's Partner Center in Menlo Park, CA.

team, and want to help the interns learn the characteristics of what it takes to actually lead a team. We were directly responsible for identifying research questions, organizing study plans, recruiting participants, executing studies, and reporting results to the designers and project managers on our teams.

LC: They drive important product decisions with user data, and they frequently organize focus groups around the office, where researchers and designers gather feedback directly from the people who use the products. I was glad to see how much value Facebook places on qualitative research.

KÖ: Facebook is very innovative in that way. Making decisions solely based on hard data can only get you so far. If you want to gain radical insight that will dramatically shift how you approach the design of a product, you need to conduct some form of qualitative research. Talk to people. That's what they're doing at Facebook.

HCDE: What did you bring from your education in HCDE to your internship?

KÖ: I know there were at least two courses, HCDE 519 (Qualitative Research Methods) and HCDE 517 (Usability Studies), that taught me how to do qualitative UX research. I applied everything I learned in those classes to my internship at Facebook. I don't even think I would have been able to get the internship if it wasn't for what I learned in those classes, since even from the first interview I was asked about my qualitative research experience.

LC: In addition, the mentorship and guidance from our faculty advisors was critical. I would never have done well in this internship if I didn't have such strong mentorship from Gary Hsieh and Sean Munson, for sure.

KÖ: I have also learned about data visualization since being in HCDE, and that was something I received very positive feedback on at my internship. It was surprising—with just a little bit of experience with data visualization how much of an impact that can make when communicating with my team. It's exciting that this is information HCDE undergraduates are learning in HCDE 210 (Explorations in Human Centered Design)—how to use data to choose users and how to use new tools to make sense of the data.

LC: It's great that the HCDE program teaches students how the design process works—and how research and design work together because it prepares students to work collaboratively and cross-functionally on industry teams. KÖ: I definitely second that. I felt like our usercentered design background gave us a bit of an upper hand when it came to communicating our ideas and presenting recommendations to the team. We have learned how to communicate with the designers as well as the developers.

HCDE: What are you bringing from your internship back to your studies in HCDE?

LC: I have been trying to work faster. Seeing what I could accomplish in only three months was eye opening, so I'm trying to bring new project management skills back to my workload here. Other than that, I have identified things I want to work on to become an even better researcher and communicator.

KÖ: In a very silicon-valley way, Facebook researchers always begin their presentations with a tl;dr (too long; didn't read) slide. In this single slide, researchers explain the problem and very high level findings to fellow researchers and team members. The tl;dr slide grounds everything you will hear/read next. I think this is particularly useful for environments like conferences, where the amount of information and pace of information flow makes it very difficult to grasp the core concepts. I will, more likely than not, have a tl;dr spirited opening slide in my future conference presentations.

# **THE WAR ON INFORMATION**

HCDE Assistant Professor Kate Starbird's research into crisis informatics uncovered a vulnerable system susceptible to conspiracy theories, political propaganda, and disinformation

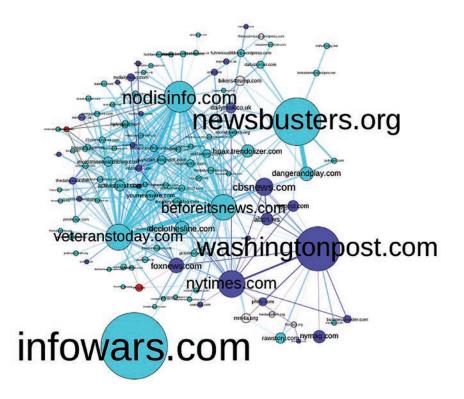
Researchers in HCDE Assistant Professor Kate Starbird's Emerging Capacities of Mass Participation (emCOMP) Lab investigate how social media can help people respond to disaster events—an emerging field known as "crisis informatics." Starbird and her students study social media activity during and after natural disasters, such as the Oso landslide in Washington state, as well as man-made crisis events, like the Boston marathon bombing and mass shooting incidents. Scenerios in which access to timely and accurate information can save lives.

"Over time, we noted that a similar kind of rumor kept showing up, over and over again, after each of the man-made crisis events—a conspiracy theory or "alternative narrative" of the event that claimed it either didn't happen or that it was perpetrated by someone other than the current suspects," Starbird writes in a blog post about her research.

To attempt to understand where these rumors start, and who (or what) is responsible for spreading them, in early 2016 Starbird and her students began collecting tweets mentioning shooting incidents in the United States that specifically indicated such shootings were false.

Using data collected from Twitter over the next nine months, the students built network graphs of the websites referenced in the tweets to examine the prevalence of certain sites and visualize the connections between them. The network graph, Figure 1, represents websites that were cited in tweets containing false information about shooting incidents in 2016.

"When we went to examine the data in Winter 2016, we were extremely



**Figure 1.** Domain Network Graph, Colored by Media Type. Purple = mainstream media; Aqua = alternative media; Red = government controlled media. Nodes are sized proportionally to the total number of tweets that linked to the domain, and they are connected when one user wrote different tweets citing each domain. **Starbird, Kate. 2017. Examining the Alternative Media Ecosystem through the Production of Alternative Narratives of Mass Shooting Events on Twitter.** 

confused by some of the intersections. Why were a handful of "Anonymous" accounts and Gamer-Gaters connected with Pro-Palestinian accounts on one side and European white nationalists on another? Why were seemingly left-wing supporters of Wikileaks connecting with seemingly rightwing supporters of Donald Trump? And why did these groups come together to talk about alternative narratives of mass shooting events? It didn't make sense. Yet." Starbird writes.

The researchers found that more than half of the sites represented in their dataset tweeted support of conspiracy theories. Mainstream media sites are represented in the data from their tweets either debunking rumors, or their tweets of factual accounts of the events. Often, conspiracy theorists would use those factual tweets as evidence of a "mainstream media coverup." Starbird writes: "In the case of the New York Times, the newspaper posted an article explicitly denying alternative narratives of the Orlando shooting event. This denial was then cited several times by those promoting those narratives—as even more evidence for their theory."

The researchers then conducted an in-depth qualitative analysis of all of the domains represented in their data, uncovering what Starbird refers to as the alternative media ecosystem.

"We detected strong political agendas underlying many of these stories and the domains that hosted them, coding more than half of the alternative media sites as primarily motivated by a political agendawith the conspiracy theories serving a secondary purpose of attracting an audience and reflecting or forwarding that agenda," Starbird writes. "It quickly became clear that the U.S. left (liberal) vs. right (conservative) political spectrum was not appropriate for much of this content. Instead, the major political orientation was towards anti-globalism. Almost always, this orientation was made explicit in the content."

Depending on the nature of the websites referenced in the tweets, the term "anti-globalist" stems from a range of sentiments, including anti-mainstream media, antiimmigration, anti-corporation,



anti-U.S. government, and anti-European Union.

The researchers also discovered the presence of botnets, or automated accounts, in their dataset. Certain botnets controlled hundreds of accounts tweeting conspiracy theories and linking back to the same website, with the purpose of propagating politicized content. Using methods such as displaying a "real" profile picture (even if stolen from other people online), the team found certain botnets are able to bring actual twitter users into its network.

Starbird's research into the alternative media ecosystem highlights the **HCDE Assistant Professor Kate Starbird** 

important role of today's designers in building robust systems to be more resilient against disinformation.

Starbird will present her paper, "Examining the Alternative Media Ecosystem through the Production of Alternative Narratives of Mass Shooting Events on Twitter," at the International Conference on Web and Social Media in May 2017. Her research into the spread of disinformation is ongoing.

Read Kate Starbird's full paper and blog post describing the research at http://bit.ly/Starbird-2017.

# **GRACE HOPPER CONFERENCE**

HCDE senior Joanna Bailet shares her experience attending the 2016 Anita Borg Grace Hopper Celebration of Women in Computing Conference

Donations to HCDE enrich the UW student experience by supporting extracurricular opportunities including conference travel. Learn more at hcde.uw.edu/give.

The HCDE department has given me so many fantastic opportunities from being able to participate in collaborative research and design projects to networking with large and local technology companies, but the best opportunity I have had so far was being sponsored to go to the Grace Hopper Conference in Houston, Texas this past October. The conference opened my eyes to the endless possibilities available for a woman in tech and the best way to go after these amazing opportunities. At the conference I was able to attend some amazing talks hosted by women from all

over the world and network with other enthusiastic attendees at these talks. Along with these sessions, the conference had a 300+ company career fair which gave me valuable time to practice pitching myself to recruiters, ask questions about each company, and network with other UX/UI professionals who were representing these companies. Overall, this has been one of the biggest opportunities that I have had to put into practice all of the skills we have been taught about selling ourselves and our skills in our HCDE classes. As a result of attending these talks, I met many women who I made connections with both in person and on LinkedIn! This experience helped me realize how valuable UX and the HCDE techniques are to many companies and I am extremely appreciative that I got to represent the UW HCDE department at this year's Grace Hopper Conference. - Joanna Bailet



HCDE undergraduate students Stephanie Stanek and Joanna Bailet at the 2016 Grace Hopper Conference.

# **2016 SUPPORTER RECOGNITION**

The Department of Human Centered Design & Engineering thanks the following individuals and corporations for their financial support of departmental scholarships and student opportunities in 2016

Accenture Paul V. Anderson, Ph.D. Annalise M. Beck Anthro-Tech, Inc. Aquent Aviation Technical Services Cristina Bailet Benevity Michael P. Berg Blink Interactive, Inc. The Boeing Company **Stacey Brunelle** Dale P. Callison

John Castro

Judith Clark

**Deloitte Digital** 

Google Inc.

**IBM** Design

Andrew Davidson

Mary M. Deaton Peter T. Delaney

Ann Marie & Donald Eberhart Heather M. Eberhart Kai Fujita

Google Inc.

Eileen Shan-lin Hsu

Marie H. Kotowski Dr. Jerrod A. Larson Joy T. Lashley Christine M. Loucks-Jaret Prof. and Mrs. David W. **McDonald Microsoft Corporation** Prof. Sean A. Munson Roxane S. Neal Sean T. Norsworthy Tableau Software, Inc. Oculus VR

lasen A. Peterman

Prof. Julie A. Kientz

REI

Glenn J. Pruiksma

Dr. Constance and The Hon. Norman Rice

Randall L. Rothe

Sandia National Laboratories

Donna M. Sakson

Daniel E. Sandoval

Matthew P. Tevenan

Prof. Michio Tsutsui

The Walt Disney Company

Carolyn Y. Wei, Ph.D.

West Monroe Partners

Monica Carstens

# **UCD CHARETTES FOR K-12 OUTREACH**

HCDE faculty member Andrew Davidson is building an outreach pipeline to get the next generation of college students excited about Human Centered Design & Engineering

Ask any Human Centered Design & Engineering graduate how HCDE is practiced in the real world, and you will hear a wide range of applications—from researching collaboration, cognition, and learning; designing tools to improve health and wellbeing; and building new web apps and technologies. However, many students enter college unaware of the diversity of fields to which an HCDE degree can be applied.

HCDE Senior Lecturer Andrew Davidson wants to introduce pre-college students who may not



otherwise be looking toward Engineering to the HCDE major and the user-centered design process. As of 2016, HCDE has hired a Research Assistant, Computer Science & Engineering PhD student Catie Baker, to work with Davidson on formally developing HCDE's outreach program.

Davidson and Baker are training teams of HCDE undergraduate and graduate students to become facilitators of User-Centered Design Charettes—fast-paced, hands-on exercises intended to give K-12 students a crash course in the human-centered design process, from brainstorming user needs; developing use-case scenarios; sketching interaction designs; and presenting concept ideas.

The HCDE teams lead the UCD Charettes either in local middle and high schools, or they welcome classes to visit the University of Washington campus for the day.





Andrew Davidson, left, with HCDE student volunteers leading a UCD Charette in Spring 2016.

In Spring 2016, teacher Jessica Wade brought her class of eighth-grade students to participate in one of the UCD Charettes held in the CoMotion Makerspace on the UW campus. "Who would use a smart car and what features would they need?" was the Charette topic of the day.

The visiting students were part of an accelerated math and science middle school program about 90 miles south of Seattle in Olympia, Washington. "Many of these students have goals of studying traditional engineering in the future," Wade said. "They're at a place in their lives where they can go down any path they want. I am trying to show them the variety of options out there."

Just a few of the innovative smart car concepts conceived by Wade's students that day include: a voice-activated system to help emergency responders communicate while driving; an app that turns off a driver's phone screen when they get behind the wheel; and a realtime camouflaging vehicle skin equipped with imaging data from google earth.

If you know of a K-12 school that would like to get involved with HCDE, find more information at www.hcde.uw.edu/about/k12.



# **ASK AN ALUM**

Recent HCDE graduates describe why they were drawn to the program, and share advice for future students

## Gary J. Anderson Master of Science, 2016

#### Why did you choose HCDE?

I moved to Seattle in 2012 to accept a new job. The unseen element of that statement is that I was actively pursuing UX jobs in Seattle because it would put me in proximity of UW and the opportunity to be a part of the world-class HCDE program. Participating in the program was a goal for me; although I had been



lucky enough to already be a home grown UX practitioner, I wanted to add an academic pedigree to my experience.

#### Where are you now?

I currently serve as a UX Program Manager at Microsoft. While many roles may be focused on direct research or design work, I have the unique opportunity to practice (and lead) both types of work. This mix ensures that there are always new challenges and discoveries every day.

#### What is your advice for new HCDE students?

Within the HCDE program, you are in the nexus of the world's best upcoming researchers and designers—build connections that will last beyond your time in the program. Treat every group project assignment like a professional work assignment. Not only is this critical to your development as a professional, it will also aid you in developing a solid portfolio.

## Yoanna Dosouto Bachelor of Science, 2016

#### Why did you choose HCDE?

Since a very early age, my father and grandfather cultivated in me the love for math and science. I grew up surrounded by mathematical analysis and trigonometry for engineers. However, I always felt the pull towards the arts and the history of human nature. Before finding HCDE I was working towards a career in computer science. After my fresh-



man year, I was fortunate to land an internship at an HCl lab. There, I was exposed to usability testing and user research and I was immediately hooked. HCDE was the perfect blend for me. It allowed me to pursue my love for science, art, and the study of human behavior.

#### What is your advice for new HCDE students?

During my first year as an HCDE major, I got involved with two research groups. Professor Starbird's "Tracking the online spread of misinformation after disaster events" and Professor Munson's "Why and how do people stop self-tracking?" During my senior year, I worked at Premera as a UX researcher and designer. Those experiences allowed me to apply a variety of research methods, work with many different user groups and use large data sets to support research. Additionally, I was the President of Women in User Experience (WiUX), a student-run conference that allows women to learn more about careers in the UX field. HCDE definitely helped me grow the passion and skills necessary to kickstart my career as a UX Researcher in the Seattle area.

# **2016 AWARDS & ACCOLADES**

## AWARDS

#### **National Science Foundation Career Award**

HCDE Assistant Professor Sean Munson was awarded a five-year grant to fund his research on how people find value in their personal informatics data.

#### NSF Graduate Research Fellowships

HCDE PhD students Dawn Sakaguchi-Tang and Kathryn Shroyer were awarded Graduate Research Fellowships from the National Science Foundation. Dawn Sakaguchi-Tang's award is in the field of Human Computer Interaction, and Kathryn Shroyer's award is in the field of STEM Education and Learning Research.

#### Husky 100 Award

HCDE alumna Amy Wang was awarded the Husky 100 award in 2016. The Husky 100 recognizes 100 UW undergraduate and graduate students from Bothell, Seattle, and Tacoma in all areas of study who are making the most of their time at the UW.

#### ACM SIGDOC Rigo Award

HCDE Professor Jan Spyridakis received the 2016 Rigo Award from the Association for Computing Machinery's Special Interest Group on the Design of Communication (SIGDOC), to celebrate her lifetime contribution to the field of communication design.

## 2016 GRADUATION CEREMONY AWARDS

#### Academic Excellence Award

Gary Anderson (MS), Yoanna De La Caridad Dosouto Guerra (BS)

#### **Innovation Award**

Ankur Agrawl (MS), Michael Gilbert (PhD), Daniel Rowland (BS)

#### Leadership & Engagement Award

Terri Lovins (MS), Toni Ferro (PhD), Samantha West (BS)

#### Myron L. White Award (the Mikey)

HCDE Affiliate Faculty member Rebecca Destello (MS '11) received the 2016 Mikey Award for being a dedicated friend to HCDE and a leader in the field of human-centered design and engineering.

## **SCHOLARSHIPS**

HCDE awarded the following undergraduate student scholarships in 2016.

#### Boeing Scholarship Kate Cowley



Sakson Scholars: Tariku-Di Allen (BS), Jonathan Mark (donor), Donna Sakson (BS '82; donor), and Yodit Tefera (BS) at the College of Engineering's Scholar-Donor Luncheon in November 2016.

Clayton E. & Helen N. Danner Endowed Scholarship Amy Tang

David Farkas Endowed Fund for Undergraduate Student Support Shaunte Smith

**Donna M. Sakson Endowed Scholarship** Tariku-Di Allen & Yodit Tefera

Donna M. Sakson Endowed Scholarship for Excellence through Diversity Brian Illa

Hershel D. Graves Scholarship Lacey Peil

# **CASCADIA RISING EARTHQUAKE DRILL**

Researchers with HCDE's CoSSaR center participate in the largest disaster drill in Pacific Northwest history to study how people communicate in emergency situations

Researchers of Human Centered Design & Engineering know that the most complex of situations require even more attention toward people-centered solutions. Disaster preparedness is one such application of humancentered design that can keep the region and its people safer in times of crisis.



In Summer 2016, students with HCDE's Center for Collaborative Systems for Security, Safety, and Regional Resilience (CoSSaR) participated in Cascadia Rising, a four-day, multi-state exercise simulating a massive-scale earthquake and tsunami along the Cascadia Subduction Zone. Such an event would be one of the most complex disaster scenarios that emergency management and public safety officials would face in the Pacific Northwest, and it would require coordination from agencies across Oregon, Idaho, Washington, California, and Canada at all levels—cities, counties, state agencies, federal officials, the military, tribal nations—as well as non-government organizations and members of the private sector.

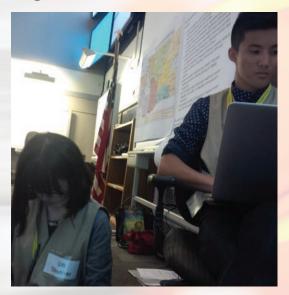
As participant observers of Cascadia Rising, CoSSaR-trained students were placed at emergency operations and coordination centers around Seattle to observe the flow of information under simulated post-disaster conditions. The students gathered data on who the exercise participants were communicating with and how, both within their agencies and between outside groups.

In the months leading up to the exercise, students joined a research group, directed by HCDE Professor and CoSSaR Director Mark Haselkorn, focused on understanding various disaster preparedness agencies and their communication methods and tools. Students participated in training sessions at local Emergency Operations Centers, and received certifications in emergency response.

Dharma Dailey, a doctoral candidate in HCDE, participated in the Cascadia Rising Drill and Directed Research Group. Dailey regularly works with Professor Kate Starbird in the Emerging Capacities of Mass Participation (emCOMP) Lab to research how information reaches the public during crisis events.



University of Washington students stationed as Participant Observers during the 2016 Cascadia Rising Exercise.



"Whereas in emComp lab we are looking at how people communicate during crisis events, CoSSaR researchers study how safety and security experts share information on all of the other days," Dailey explains, "so there is a lot of overlap in our research."

"You have to imagine, if a 9.0 magnitude earthquake hit, the expectation is the I-5 highway corridor will be disrupted, and it will be hard to get supplies in and out. So, supplies may have to come by sea—in which case the Navy may need to be involved. And what if the ports are damaged? It is chaos. And it is why we need to focus on preparedness now."

Dailey was stationed at the Kitsap County Department of Emergency Management. Cascadia Rising participants at her facility included representatives from public health facilities, the department of transportation, the electric company, and dozens of others. "Preparedness work is about identifying resources in your community," Dailey noted. "We were observing interagency coordination and the way technology played a role—what tools people use to communicate."

Cascadia Rising participants had open lines of communication to multiple points of contact at all times. "The exercise operators would throw 'injects'—or new problem scenarios—into the drill. For example, an inject could say 'actually, the hospital you are about to transport all of these people to has been damaged. What is your plan B?," Dailey described. "It was great to observe this exercise from a human-centered design and engineering lens, and ask 'how does this piece of technology support this missionbased work?' I observed people quickly getting comfortable using new pieces of technology, efficiently troubleshoot issues, and working through multiple solutions."

The goal of the HCDE researchers participating in Cascadia Rising was to help map out how the regional information sharing environment currently works, and where improvements could be achieved.

Students contributed data to the after-action reports for the communities and state. "The best way for the response community to become more prepared is through exercises like this," Dailey said. "I also think reflection on our experience is incredibly important for all of us to prepare for future drills and even real disaster scenarios."

Ongoing research groups directed by Professor Haselkorn are conducting qualitative analysis of the data collected by the students during 2016's Cascadia Rising.

# **2016 SEMINAR SERIES**

Catch up with the latest discoveries by HCDE faculty and researchers in the 2016 Seminar Series



#### Cecilia Aragon Why Humans Should Care About Data Science

The importance of a human centered approach to data science as necessary for the success of 21st century discovery.



#### Charlotte P. Lee Developing the Model of Coordinated Action (MoCA)

Defining the problem space of practitioners and researchers in Computer Supported Cooperative Work (CSCW).



Scott Miles

Stakeholder Understanding of Recovery from the 2010-2011 Canterbury Earthquake

From decision-driven data-making to data-driven decision-making.



David Ribes Legacy, Technology, and Change

The challenges (and advantages) of managing and sustaining legacy technologies, using the example of long-term research infrastructures.



#### Julie Kientz Considerations for the Connected Family

Research findings on family practices, values, aspirations, and fears in relation to use of connected devices in the home.



## David W. McDonald

#### Who Wants to Read This?!?

Design challenges for user generated content systems, using case studies from Wikipedia research an example.



#### Sean Munson

From Personal Data to Action: Making Personal Informatics Work

On making use of self-tracking health data and promising directions for new tools.

## WATCH THE FULL SERIES ONLINE AT:

#### hcde.uw.edu/seminar-series



# **STAY CONNECTED**

Stay in touch with HCDE's online networks to get the latest department news, find out about upcoming events, and connect with current students and alumni

# HCDE ON FACEBOOK

Subscribe to HCDE's public events on facebook and catch the latest departmental news. HCDE Peeps is a community-powered private group for students and graduates.

HCDE ON FACEBOOK: facebook.com/hcde.uw HCDE PEEPS GROUP: bit.ly/HCDE-Peeps

# HCDE TWEETS

Follow our tweets for the latest #HCDE announcements and updates from our faculty and the UW campus community. **twitter.com/hcdeUW** 



See behind-the-scenes photos of HCDE student projects on the HCDE Instagram Feed. **instagram.com/hcdeuw** 



See what types of jobs our graduates have found, and why current students chose HCDE. ALUMNI: hcde.uw.edu/alumni/directory STUDENTS: hcde.uw.edu/students

# LINKEDIN GROUP

Connect with HCDE students, faculty, and graduates and join discussions in the HCDE LinkedIn Group. **bit.ly/LinkedIn-HCDE** 



Connect with HCDE graduates and other Seattle-area UX Professionals on Meetup.com to find regional UX-related events. **meetup.com/UWHCDE** 

# **ANNUAL EVENTS**

Please join HCDE for any of the following community events

### HCDE SEMINAR SERIES WEDNESDAYS, AUTUMN QUARTER

HCDE faculty discuss their latest discoveries in a 10-week seminar on current research in the field of human centered design. hcde.uw.edu/seminar-series

## UX SPEAKER SERIES FRIDAYS, WINTER QUARTER

HCDE welcomes industry experts to speak about current topics in User Experience (UX). hcde.uw.edu/ux

## HCDE OPEN HOUSE HELD ANNUALLY IN JUNE

The HCDE Open House features student capstone projects, presentations from Directed Research Groups, prizes, food, and fun. **hcde.uw.edu/open-house** 

## HUMAN CENTERED DESIGN & ENGINEERING

#### UNIVERSITY of WASHINGTON

College of Engineering 428 Sieg Hall Box 352315 Seattle, WA 98105

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# HCDE CORPORATE AFFILIATES PROGRAM

Joining the Human Centered Design & Engineering Corporate Affiliates Program is the best way for your organization to work with HCDE students and hire HCDE graduates. Affiliates choose their level of membership based on the needs of their company and their desired level of involvement with HCDE.

# » CONNECT

Build relationships with HCDE faculty, students, alumni, and other Corporate Affiliates.

## » COLLABORATE

Sponsor class or capstone projects, or propose Directed Research group topics.

## » NETWORK

Receive invitations to HCDE events throughout the year, including the annual HCDE Career Fair.

## » RECRUIT

Post jobs and internships to the HCDE Jobs and Internships Database and host on-campus Employer Information Sessions.

# Learn more and sign up: hcde.uw.edu/cap

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