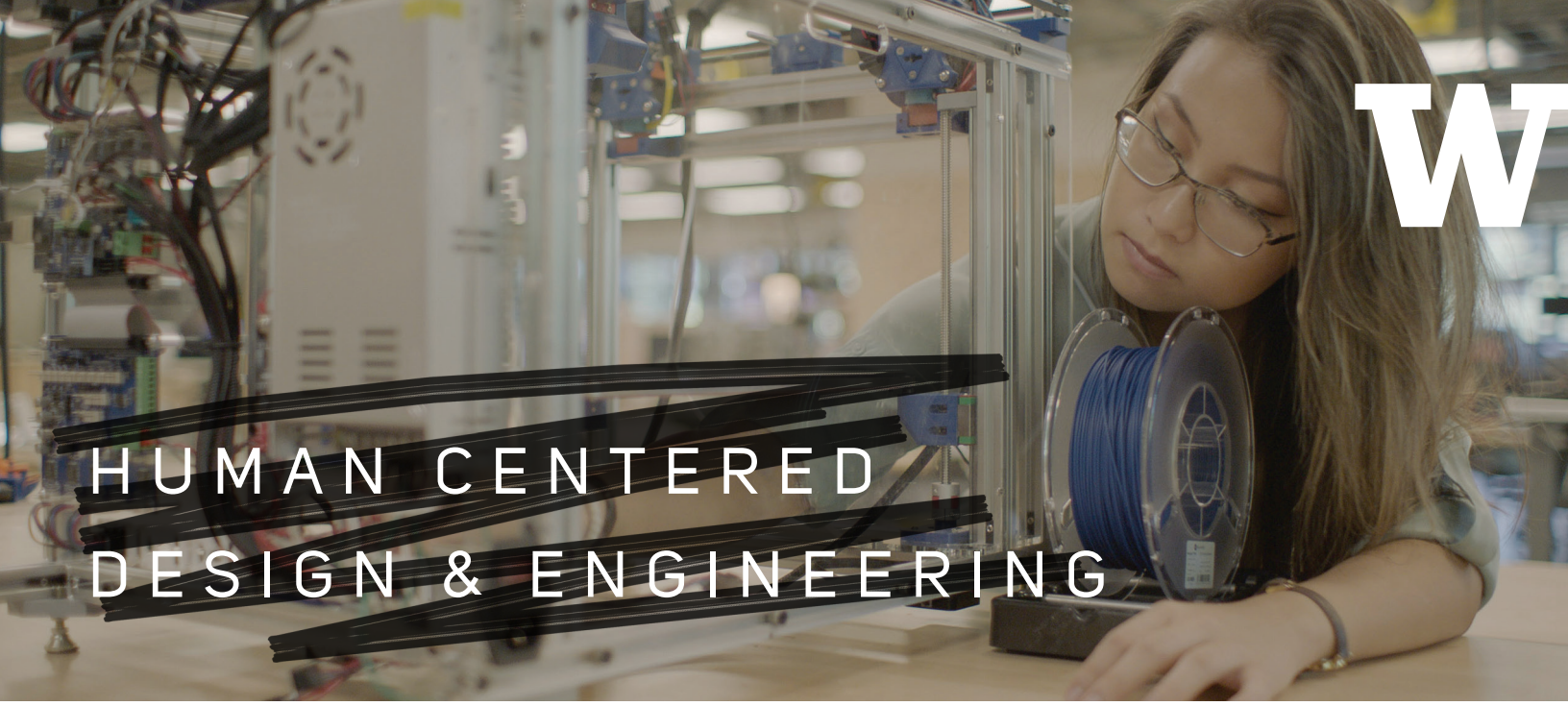


HUMAN CENTERED DESIGN & ENGINEERING

The University of Washington's Department of Human Centered Design & Engineering prioritizes equity and empathy in the construction of the future. We connect complex methodologies, systems, and technologies to critical needs in everyday life.

OUR GUIDING PRINCIPLES

Respect for people

We respect all individuals, communities, and their agency. We assume positive intent on behalf of those we work with and strive to understand before acting.

Interdisciplinary exploration

We celebrate innovation, iteration, and reflection using interdisciplinary methods and perspectives. As we strive toward excellence, we take acceptable risks and learn from mistakes. We seek opportunities for collaborative exploration.

Equity

We centralize the needs of those who are often marginalized. We work to create environments and practices that are open and safe for all participants and perspectives from all social identities.

Thoughtful impact

We are action-oriented toward challenges while continually questioning and improving. We continue to follow and study the repercussions of our actions so that they maximize the possible benefits while anticipating and minimizing possible harms.

DEPARTMENT HIGHLIGHTS

3	CORE DEGREE PROGRAMS
3	AFFILIATED GRADUATE DEGREE PROGRAMS
20	RESEARCH LABS AND CENTERS
70	AVERAGE INDUSTRY PARTNERSHIPS ANNUALLY
100%	OF STUDENTS PARTICIPATE IN RESEARCH
100%	OF PH.D. STUDENTS RECEIVE FIRST-YEAR FUNDING
$23.9	MILLION IN GRANT FUNDING FY2024

91 COLLABORATIONS
IN 2023-2024
(across industry, academic, federal, and community-based non-profits)

STUDENTS

HCDE students graduate with a strong foundation in designing user experiences and interfaces, creating information visualizations, conducting user research, designing for the web, and building web technologies.

DEGREE PROGRAMS

- **Bachelor of Science (B.S.)** provides students with a solid foundation of engineering principles rooted in a broad range of disciplines to investigate the interaction of people with technology and technical development.
- **Master of Science (M.S.)** fosters students' knowledge and skills to design and evaluate technologies and user interfaces, and prepares students for leadership roles in information design, user experience design, user research, human-computer interaction, design thinking and related specializations.
- **Doctor of Philosophy (Ph.D.)** prepares students for notable careers in academia, industry, and government. Students conduct original research to design and engineer systems to support human endeavors.
- **The User-Centered Design (UCD) Certificate** provides graduate-level students the opportunity to explore the latest theories, tools and techniques in user research and user-centered design.

MAKING CONNECTIONS
Mentorship Pods Program

HCDE's mentor pods program pairs small groups of HCDE students with a mentor who works in an HCDE-related discipline. In 2024, 200 students participated in pods paired with 50 industry mentors.

OUR GRADUATES

HCDE graduates find careers as designers and researchers who improve people's interactions with technology and the world around them. Job titles of our graduates include:

- UX designer*
- Software engineer*
- Design researcher
- Interaction designer
- Program manager
- UX architect
- Experience strategist
- UX researcher*
- Content strategist
- Instructional designer
- Product manager
- UI designer
- Web UX designer

**Denotes most common*

STUDENT DEMOGRAPHICS

227	Undergraduate students
74	B.S. degrees awarded
243	Master's students
105	M.S. degrees awarded
65	Doctor of Philosophy students
9	Ph.D. degrees awarded
29	Graduate Certificate in User-Centered Design students

DIVERSITY

10%	students of color
72%	women-identifying students
68%	Washington state undergraduates
24%	first-generation undergraduate students

2023-2024 data

INDUSTRY PARTNERSHIPS

Our Corporate Affiliates Program provides a direct connection between industry partners and HCDE students and faculty. Partners sponsor student projects, propose research topics for faculty and students, host design jams and workshops, and recruit students for internships and careers.

Our industry partners include

- Microsoft
- Uber
- Amazon
- Nordstrom
- Sony
- Sound Transit
- Expedia
- Brooks Running
- Adobe
- Boeing
- Google
- Meta
- T-Mobile
- City of Bellevue
- City of Seattle
- PATH
- Allen Center for AI
- Fred Hutchinson Cancer Research Center
- Seattle Children's Hospital

RESEARCH

RESEARCH AREAS

Our department's research and teaching focus on six interrelated areas of study:

- Influencing Behavior, Thinking, and Awareness
- Design for Emergent Collaborations and Organizations
- Low Resource and Underserved Populations
- Material and Embodied Technologies
- Data Science and Data Visualization
- Learning in Professional and Technical Environments

FACULTY

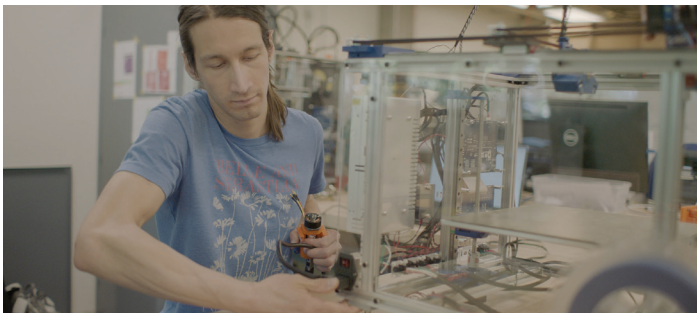
20 Tenured, tenure-track and research
65% women

8 Career teaching professors
50% women

24 Joint or adjunct with other UW departments

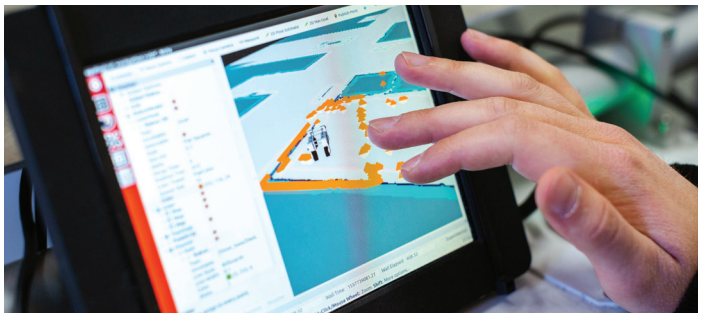
24 Affiliate faculty from industry or other institutions

RESEARCH HIGHLIGHTS



Harnessing the power of machines for creativity

Students in Machine Agency, a research lab directed by HCDE assistant professor Nadya Peek, are building low-cost, adaptable tools that can translate ideas into physical reality. Ongoing projects include digital fabrication tools for low-volume manufacturing, testing and verification in distributed production, and working with scientists to adapt automation for their various fields.



New tools for cloud-based collaboration

The Center for Collaborative Systems for Security, Safety and Regional Resilience, directed by HCDE professor Mark Haselkorn, is spearheading a regional partnership of governmental and industry partners in the development of a cloud-based platform for real-time data sharing, collaborative planning, and coordinated response to quickly clear roadway incidents and reduce congestion.

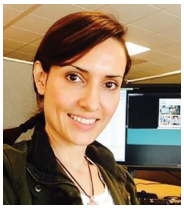
Developing accessible technology and experiences

HCDE associate professor Leah Findlater is a faculty lead on a cross-campus consortium focused on making technology accessible making the world accessible through technology. One recent project, SoundWatch, is a smartwatch app alerts d/Deaf and hard-of-hearing users to birdsong, sirens, and other desired sounds.

Tracing the spread of misinformation and disinformation

HCDE researchers, led by associate professor Kate Starbird, are tracing the online spread of mis- and dis-information online during crisis events. Starbird is a faculty director on the UW's Center for an Informed Public, a cross-disciplinary hub which conducts research aimed at promoting an informed society and strengthening democratic discourse.

ALUMNI MAKING IMPACT

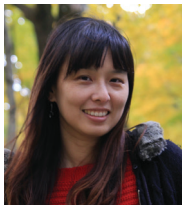


Ona Anicello (M.S. ‘13) is the director of design and research for Alaska Airline's guest digital experience. Prior to her work at Alaska Airlines, she worked at large tech companies namely Facebook, Microsoft, and Amazon. In her free time, she gives back to the community as president of UXPA Seattle and currently is teaching a usability testing course in the HCDE department.

Ario Jafarzadeh (M.S. ’06) is the head of design at Roblox where he leads a team focused on improving the experience for the millions of kids who connect each day. Prior to Roblox, Ario’s led design on products including Gmail, Amazon Kindle, Serve (the Postmates delivery robot), as well as games at Activision/King. He’s the author of several patents and is currently a visiting instructor at HCDE.

Kiley Sobel (Ph.D. ’18) is a research scientist at an innovation lab housed at Sesame Workshop, Sesame Street's nonprofit. She focuses on using emerging media and technology to help children, especially those from underrepresented and underserved communities. She received a NSF Graduate Research Fellowship and HCDE’s Graduate Award for Leadership & Engagement.

Alex Thayer (B.S. '00; M.S. '04; Ph.D. '12) is head of research at Amazon Search and an affiliate assistant professor in HCDE. Alex's work focuses on explorations of the social-technical gap and how we make sense of people's habits, practices and messy lives. He has published 10 patents on haptic feedback systems, immersive displays, wearable technology, and 4D printing.



Christina Chung (Ph.D. ’18) is an assistant professor in informatics at Indiana University Bloomington. She researches how designs of ubiquitous computing and personal informatics technologies can enhance relationships, motivate health behavior, and support care. In 2020, she received a Trustees Teaching Award and a Luddy Faculty Fellowship from Indiana University.

Behzod Sirjani (M.S. ’12) is the founder of Yet Another Studio, an independent research practice where he works with organizations of all sizes to build intentional, responsible and sustainable practices of learning. Prior to Yet Another Studio, Behzod led research operations at Slack and was a senior UX researcher at Facebook, where he co-founded the Research Associates Program.

Carol Taylor (M.S. ’08) is a principal product design manager at Microsoft. As co-founder of Sakson & Taylor's S&T Onsite, she helped grow the business into a leading U.S. information design company. She was a partner in MAGI Interactive and has held leadership roles at T-Mobile, Infospace and Napster. She co-founded the HCDE mobile research group.

Rebecca Walton (Ph.D. ’11) is an associate professor of technical communication and rhetoric at Utah State University, where she researches justice interventions in workplaces. She has informed implicit bias training, policy revision, and curriculum development at multiple universities and is the editor of Technical Communication Quarterly.

“Human Centered Design & Engineering is where people can engage in research and education that promotes a more just and equitable future. Our students, faculty and alumni produce innovations that put people’s needs at the forefront of design and engineering to meet areas of greatest societal need."

Julie Kientz, Professor and Chair