Mindy Hoover, PhD

USER EXPERIENCE RESEARCHER

PROFESSIONAL EXPERIENCE

Google | UX Researcher

May 2022 - JAN 2023

Led multiple research studies, in partnership with Software Engineers and Product Managers, to understand complex developer user journeys, prioritize potential features, and influence product strategies.

Conducted interviews, focus groups, and surveys to understand the needs of Flutter's desktop developers and prioritize work for 2023.

Improved product features critical to Flutter's long-term business plan by embedding myself into the early-stage engineering process and providing actionable, data-based guidance to meet user needs.

Design Interactive | Research Portfolio Manager

JAN 2022 - MAY 2022

Led a team of researchers, engineers, and PMs to provide user-centered, data-driven augmented reality learning tools for the U.S. ARMY and NAVY.

Identified new areas of research to advance the XR training industry and proposed research plans to the U.S. government for funding consideration.

VR Applications Center | Research Assistant

JAN 2013 - DEC 2021

Collaborated with cross-functional teams from Boeing, John Deere, and Collins Aerospace to create and test AR/VR solutions for simulation and training.

Conducted 150+ in-person usability and A/B testing studies and trained novice researchers to conduct studies using AR and VR hardware such as the Microsoft HoloLens and Oculus Quest.

Developed new processes for sourcing online VR study participants and automating data collection, resulting in more efficient studies with more diverse sample populations.

Communicated updates and results to stakeholders throughout the research process and published 18 peer reviewed papers on user-centered XR research.

CONTACT

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in @melyndahoover

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EDUCATION

Doctor of Philosophy
Human Computer Interaction

IOWA STATE UNIVERSITY • DEC 2021

Dissertation Title:
Adaptive XR Training Systems Design, Implementation, and Evaluation 🔗

GPA: 3.97/4.00

Master of Science
Human Computer Interaction + Mechanical Engineering

IOWA STATE UNIVERSITY • MAY 2018

Minor: Industrial Engineering

Thesis Title:
An Evaluation of the Microsoft HoloLens for a Manufacturing Guided-Assembly Task 🔗

GPA: 3.96/4.00

Bachelor of Science
Mechanical Engineering

IOWA STATE UNIVERSITY • MAY 2016

GPA: 3.86/4.00

INTERNSHIPS

Google Ads | UX Research Intern

MAY 2018 - AUG 2018

Designed and facilitated an 8-day diary study (n=50) to capture user perceptions of ads using DScout, resulting in a list of recommendations for producing positive experiences with Google Ads.

Conducted usability studies on new advertising format designs and recommended solutions to improve discovery and usability.

Applied card sorting and participatory design methods to shape the information architecture of new advertising formats.

Boeing | Human Factors Intern

MAY 2016 - AUG 2016

Designed an experiment to evaluate the ergonomic stability of pilots using new 777X touch screen displays during turbulence.

Interviewed and surveyed commercial and military pilots to identify and prioritize opportunities for new aircraft navigation features.

PROFESSIONAL COMMUNITIES

Frontiers on Computer Science | Guest Editor 🔗

OCT 2021 - FEB 2023

Co-edited special issue on remote XR research including composing a call for papers, reviewing submissions, and authoring an editorial.

CHI Conference | Workshop Co-Organizer 🔗

DEC 2020 - MAY 2021

Reviewed workshop paper submissions and facilitated discussion at the first Computer-Human Interaction Conference Workshop on Remote XR research.

RECENT PUBLICATIONS 🔗

Remote Research on Locomotion Interfaces in VR: Replication of a Lab-Based Study on Teleporting Interfaces
IEEE VR • 2022

Remote XR Studies: Exploring Three Key Challenges of Remote XR Experimentation
ACM CHI • 2021

Measuring the Performance Impact of Using the Microsoft HoloLens 1 to Provide Guided Assembly Work Instructions
ASME JCISE • 2020

SKILLS

Research Methods

Usability Testing
Interviews
Surveys
Focus Groups
A/B Testing
Card Sorting
Diary Studies
Participatory Design
Cognitive Walk-Through

Analysis Methods

Statistical Analysis
Affinity Diagrams
Qualitative Coding
Theme Analysis
Personas
Task Analysis
Journey Maps
Heuristic Analysis
Competitive Analysis

Tools

R Studio	SPSS
Excel	Sheets
SQL	Python
Qualtrics	dScout
M Turk	Prolific
Unity 3D	C++
Axure RP	HTML

AWARDS

3DUI Contest Runner-Up 🔗
IEEE VR • 2019

Presidential Fellow
IOWA STATE UNIVERSITY • 2018

Leonard Gollobin Scholar 🔗
I/ITSEC • 2018

UX Design Contest 2nd Place 🔗
ISU USABILATHON • 2018

Magna Cum Laude Graduate
IOWA STATE UNIVERSITY • 2016