

Shaan Chopra

GHC SCHOLAR 2020 | ACM-WOMEN SCHOLAR 2018 | GOOGLE IWD SCHOLAR 2018

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Education

University of Washington

PHD IN COMPUTER SCIENCE & ENGINEERING

Advised by James Fogarty & Sean Munson | **Selected Coursework:** Computer Ethics

Seattle, WA, USA

Sept 2021 - ongoing

University of Maryland - College Park

MASTER OF SCIENCE IN HUMAN-COMPUTER INTERACTION

Advised by Eun Kyoung Choe | Committee: Amanda Lazar, Beth St. Jean | CQPA: 4.0 | **Selected Coursework:** Data Visualization, Health Informatics, UX Research Methods, Interaction Studio, Makerspaces

College Park, MD, USA

Aug 2019 - May 2021

Indraprastha Institute of Information Technology, Delhi (IIIT-D)

B.TECH. IN COMPUTER SCIENCE & ENGINEERING

CGPA: 8.7/10 | Dean's List (≥ 9.5 GPA 3rd Year) | **Selected Coursework:** Data Structures, Algorithm Design & Analysis, Object-Oriented Programming, Databases, Advanced Biometrics, Designing Human-Centered Systems, Wearable Applications

New Delhi, India

Aug. 2015 - May 2019

Research Interests

Human Computer Interaction, Health Informatics & Healthcare, Design Research, Participatory Design, Inclusive Design, User Experience

Skills

Research

Qualitative Research Methods • User-Centered Design • Participatory Design • Study Design • Qualitative Data Analysis • Data Visualization

Languages

Python • C/C++ • Java • Ruby • MATLAB • HTML • CSS • JavaScript

Tools and Technologies

Flask • Android Studio • Keras • SQL • NoSQL • MongoDB • Angular JS • Spring • D3.js • Tableau • \LaTeX • Tinkercad • Figma • Invision • Balsamiq • Marvel • Sketch • Photoshop • Qualtrics • UserZoom

Experience

Apprue

USER EXPERIENCE ENGINEER INTERN

- Worked with product team to identify research questions and conduct **heuristic & usability assessments, interviews, surveys & research use-cases** for 2 consumer platforms - Apprue Identity & Apprue Financial
- Generated **user stories**, system requirements & **user workflows** for these Apprue products
- Applied **machine learning & computer vision** algorithms to detect & verify components of African IDs; integrated this with Apprue Identity

Newark, DE

June 2020 - Aug 2020

INRIA

RESEARCH COLLABORATOR | LOKI TEAM

- Created a design space of visual & haptic perceptual factors that influence discovery of microgestural input methods in touch-based interfaces.
- Designed and implemented a collection of interactive graphical widgets using the proposed design space that affords microgestural input
- Designed a study to conduct **qualitative & quantitative user evaluations** of the proposed designs

Lille, France

June 2020 - Aug 2020

University of Maryland - College Park

RESEARCH ASSISTANT (UX)

- Conducted **in-depth interviews & app-based diary studies** to understand strategies of students (international & local) to cope with COVID-19
- Conducted a cross-cultural study, ran 40 **online experiment sessions** with 4 participants each under 3 experiment conditions to gauge the effectiveness of machine translation in supporting multilingual teamwork

College Park, MD

May 2020 - Sept 2020

CommunicateHealth, Inc.

UX RESEARCH & DESIGN COLLABORATOR

- Worked with CommunicateHealth to design accessible, understandable & usable mobile friendly website for healthfinder.gov for providing health information to low literacy users in the U.S.
- Employed **contextual design & user-centered design**: performed **contextual inquiry, affinity diagramming, experience modeling, low & high fidelity prototyping, wireframing, usability testing & inspections**

Rockville, MD

Sept 2019 - Dec 2019

Mélange Lab, IIIT-Delhi

RESEARCH ASSISTANT

- Applied **participatory design & qualitative research** techniques including **interviews, surveys, think-aloud sessions & thematic analysis** to understand needs & aspirations of Menstrual Health Education & Hygiene in India & propose designs of culturally-responsive technologies
- Engaged with frameworks such as Feminist HCI, Aspiration-based Design, Asset-based Design & Storied Spaces for analysis



Delhi, India

Aug 2017 - Sept 2019

- Designed & developed the front-end for the mobile-based online application procedure of Delhi Subordinate Service Selection Board examinations using Marvel & XML
- Created an application using Python-based API to respond to tweets directed to the Public Grievance Management System

Selected Projects

Tracking and Managing Stigmatized Enigmatic Health Conditions

- Worked with Dr. Eun Kyoung Choe to study experiences of people with enigmatic conditions (e.g., PCOS) with the aim to support their tracking and collaboration needs
- Conducted **in-depth interviews, participatory design & research**, and **data analysis** on an online social support platform
- Work results in a full paper  and master's thesis 

Design Methods for Dementia

- Worked with Dr. Amanda Lazar and Mary Radnofsky (a dementia rights advocate) to propose **user-centered design methods** for designing for and with people with cognitive disabilities, particularly people with dementia.
- Designed and conducted workshops implementing the proposed method.
- Used a **critical grounded theory** approach to analyze the collected data

Designing Voice-Assistant Technologies for Older Adults

- Worked with Dr. Amanda Lazar and Alisha Pradhan (Ph.D student) on a project to understand voice assistant use by older adults
- Assisted with designing the study, including conceptualization and material creation for the **participatory design** sessions
- Conducted remote design sessions with older adults
- Paper under review.


IoT-based Interactive Dolls for Shared Menopause Experience

- Designed & prototyped **IoT-based** "dolls" to support women experiencing menopause by connecting them with others experiencing the same.
- Used Particle Photon to set up a cloud-based server, connect multiple dolls, & pass & store audio-based information between the same.

Selfies & Dangerous Selfies: Understanding the Perceptions of Minors coming from Lower Socioeconomic Backgrounds in India

- Worked with Dr. Shriram Venkatraman & conducted **semi-structured interviews** with 12 to 15-year olds to understand how their socioeconomic background impacts their affordances & perception of selfies & dangerous selfie-taking behavior.
- Proposed ethical guidelines for conducting research with minors from lower socioeconomic backgrounds given the lack of proper IRB in India.

Selected Publications

S. Chopra, R. Zehrung, T. Shanmugam, E. K. Choe: **Living with Uncertainty and Stigma: Self-Experimentation and Support-Seeking around Polycystic Ovary Syndrome**. CHI'21. 

S. Chopra, E. Dixon, K. Ganesh, A. Pradhan, M. Radnofsky, A. Lazar: **Designing for and with People with Dementia using a Human Rights-Based Approach**. CHI'21 Case study. 

A. Tuli, S. Chopra, P. Singh, N. Kumar: **Menstrual (Im)Mobilities and Safe Spaces**. CHI'20 

A. Tuli, S. Chopra, N. Kumar, P. Singh: **Learning from & with Menstrupedia: Towards Menstrual Health Education in India**. CSCW'18 

S. Chopra: **Studying Intersections in Conducting Research with Minors from Lower Socioeconomic Background in India**. HCI Across Borders (HCIB), Symposium at CHI'19 

Awards & Achievements

- 2021 **Wissner-Slivka Endowed Graduate Fellowship**, UW CSE 1st year fellowship
- 2020 **College of Information Studies Alumni Chapter Scholarship**, Exceptional graduate student at the iSchool
- 2020 **Grace Hopper Conference Scholarship**, Received iSchool scholarship to attend GHC 2020
- 2018 **ACM-Women Scholarship**, Received travel scholarship to attend CSCW 2018
- 2018 **Google IWD Scholarship**, Received travel scholarship to attend IWD Celebrations at Google, Bangalore
- 2018 **Dean's List for Academic Excellence**, 9.5+ CGPA in third year of undergraduate degree at IIIT-D
- 2018,16 **Dean's List for Overall Contribution to Student Activities**, Exceptional contribution to activities at IIIT-D

Service

- 2021 **Web Co-Chair**, CSCW
- 2021, 20 **Reviewer**, CHI
- 2020, 19 **Mentor**, "User-Centered Design of Technology for People with Dementia" workshop at TECHNICA
- 2019 **Student Volunteer**, ICTD