Shaan **Chopra**

GHC Scholar 2020 | ACM-Women Scholar 2018 | Google IwD Scholar 2018

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Education

University of Washington   *Seattle, WA, USA*

PhD in Computer Science and Engineering   *Sept 2021 - ongoing*

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

University of Maryland - College Park   *College Park, MD, USA*

Master of Science in Human-Computer Interaction   *Aug 2019 - May 2021*

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

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

B.Tech. in Computer Science and Engineering   *Aug. 2015 - May 2019*

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

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

Appruve   *Newark, DE*

User Experience Engineer Intern   *June 2020 - Aug 2020*

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

INRIA   *Lille, France*

Research Collaborator | Loki Team   *June 2020 - Aug 2020*

- 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

University of Maryland - College Park   *College Park, MD*

Research Assistant (UX)   *May 2020 - Sept 2020*

- 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

CommunicateHealth, Inc.   *Rockville, MD*

UX Research & Design Collaborator   *Sept 2019 - Dec 2019*

- 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**

Mélange Lab, IIIT-Delhi   *Delhi, India*

Research Assistant   *Aug 2017 - Sept 2019*

- 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

Department of Information Technology - Delhi Govt. *Delhi, India*

INFORMATION TECHNOLOGY INTERN *June 2017 - July 2017*

- 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 (HCIxB), 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