# Shaan Chopra

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## Education

**University of Washington (UW)**                                                                           *Seattle, WA, USA*

PhD in Computer Science & Engineering; focus: Human-Computer Interaction & health                *Sept 2021 - June 2026*

Advised by James Fogarty & Sean Munson | CGPA: 3.98 | **Selected Coursework**: HCI, AI, Computer Ethics, Security, Critical Technology Practice

**University of Maryland - College Park (UMD)**                                                           *College Park, MD, USA*

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

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

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

B.Tech. in Computer Science & 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, Operating Systems, Advanced Biometrics, Designing Human-Centered Systems, Wearable Applications

## Skills

**Research & Analysis**

Human-Centered Design • AI Applications for Health • Health Informatics & Technology Design • User Experience • Participatory Design • Study Design • Qualitative Research & Analysis • Mixed-Methods • Data Visualization • Community-Engaged Research

**Languages, Tools, and Technologies**

Python • C/C++ • Java • Ruby • MATLAB • HTML • CSS • JavaScript • Flask • Android Studio • Keras • SQL • NoSQL • MongoDB • Angular JS • Spring • D3.js • Tableau • LaTeX • Tinkercad • Figma • Invision • Balsamiq • Marvel • Sketch • Photoshop • Qualtrics • UserZoom • Nvivo • Dedoose

## Experience

**Merck Sharp & Dohme (MSD)**                                                                             *Remote (West Point, PA)*

Research Intern (UX & Epidemiology)                                                                       *May 2025 - Aug 2025*

- Part of the Real World Evidence Capabilities and Analytics Team under Biostatistics and Research Decision Sciences (BARDS).
- Conducting **user research** and **usability testing** for multiple projects involving real world data platforms and partnerships.
- Informing design of different capabilities, including potential opportunities to incorporate generative AI, to support decision-making around and analysis of real world evidence health data.

**Institute of Translational Health Sciences (ITHS)**                                                     *Seattle, WA*

Research Intern                                                                                           *June 2024 - Sept 2024*

- Worked with the ITHS Hub Liaison & Network Capacity Team on a translational science project to improve participant diversity and enrolment from underserved populations in clinical trials, with a salient focus on use of remote technologies
- Conducted **interviews** & **focus groups** with clinical investigators and research coordinators
- Created a bundle of interventions to share with (i) clinical researcher teams and (ii) institutional research support services across UW Medicine, Fred Hutch Cancer Research Center, and Seattle Children's Hospital
- Investigated implementation pathways for using identified interventions within real world constraints (e.g., technology access barriers, social determinants and health disparities affecting different communities)

**Population Health Initiative (PHI) - UW**                                                               *Seattle, WA*

Social Entrepreneurship Fellow                                                                           *June 2023 - Aug 2023*

- Worked as a part of the PHI to **understand the market need** & **develop a strategy for adoption** of the new, culturally-responsive child developmental screening tool being developed by the project team (Julie Kientz, Kendra Liljenquist)
- Conducted **customer discovery & market research**, interviewing various stakeholders
- Provided recommendations on cost-measuring, policy, legal, & regulatory issues and for scaling, financial models, & sustainability of the tool

**Parkview Mirro Center for Research and Innovation**                                                     *Remote (Fort Wayne, IN)*

Research Intern                                                                                          *June 2022 - Sept 2022*

- Examined data needs & communication practices between clinicians & long covid patients
- **Conducted interviews & focus groups** with medical providers
- Used **qualitative & quantitative methods** and **data visualization** to analyze **health tracking, survey, interview & health record data**
- **Designed dashboards & digital formats** for visualizing patient personal informatics data; dashboards were integrated into Parkview Health's clinical infrastructure in 2022 and are still used by clinicians for creating personalized plans-of-care for patients

## Selected Projects

**Examining Use of Generative AI for Reflecting & Making Sense of Personal Health Informatics Data**
- Examining potential of Generative AI for supporting people draw more personalized & actionable insights from their self-tracked health data
- Using **qualitative & quantitative research methods** to study how people prompt & perceive health data insights by Generative AI
- Analyzing data using **hybrid deductive & inductive thematic analysis** with the goal of developing a framework for Generative AI use for support tracking & acting on insights from personal health data

**Examining Community-Responsive AI-enabled mHealth Tools for Hispanic & Latinx Populations**
- Collaborated with research ethicists, pediatric pulmonologists & public health researchers Seattle Children's Hospital to examine Hispanic & Latinx community perspectives of AI-powered mHealth tools for monitoring pediatric asthma
- Conducted **focus group sessions** in rural & urban Washington to explore health condition & population-specific considerations for clinical utility, usability, burden, privacy & data sharing in mHealth tools
- Led the development of a translational resource for supporting cultural-responsiveness in mHealth and AI/ML research in health⚯
- Work resulted in a peer-reviewed publication⚯

**Designing to Record & Share Menopause Experience Across Generations**
- Studied practices for recording & sharing menopause experiences across generations and within families
- Created **design sketches & probes** for recording & sharing menopause legacies to use in **remote co-design** sessions
- Work resulted in peer-reviewed publication⚯

**Tracking and Managing Stigmatized Enigmatic Health Conditions**
- Examined 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 resulted in a peer-reviewed publication⚯ and master's thesis ⚯

**Design Methods for Dementia**
- Collaborated with a dementia rights advocate and proposed **user-centered design methods** for designing for and with people with cognitive disabilities, particularly people with dementia
- Designed and conducted workshops teaching aspiring UX designers the proposed method
- Published a case study documenting our proposed method ⚯

**Designing Voice-Assistant Technologies for Older Adults**
- Collaborated 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 co-design sessions** with older adults
- Contributed to multiple peer-reviewed publications⚯⚯

## Selected Peer-Reviewed Publications

P13 **S. Chopra**, K. Juarez, J. Fogarty, S. A. Munson: **Engagements with Generative AI and Personal Health Informatics: Opportunities for Planning, Tracking, Reflecting, and Acting around Personal Health Data**. IMWUT'25. ⚯.

P12 S. A. Kraft, **S. Chopra**, M. Duran, J. A. Rojina, A. Beretta, K. I. López, R. Javan, B. S. Wilfond, M. Rosenfeld, J. Fogarty, L. K. Ko: **Community Perspectives on Artificial Intelligence-Enabled Mobile Health Tools: A Focus Group Study of Hispanic and Latinx Community Members**. Journal of Medical Internet Research. ⚯

P11 A. Pradhan, S. Erete, **S. Chopra**, P. Upadhyay, O. Sule, A. Lazar: **No, not that voice again!: Engaging Older Adults in Design of Anthropomorphic Voice Assistants**. CSCW'25. ⚯

P10 A. Pradhan, **S. Chopra**, P. Upadhyay, R. Brewer, A. Lazar: **Understanding Entangled Human-Technology-World Relations: A Case Study on Intelligent Voice Assistants for Technologies for Aging**. iConference'25. ⚯

P9 **S. Chopra**, L. Orii, K. Juarez, N. Tieanklin, J. Fogarty, S. A. Munson: **Menopause Legacies: Designing to Record and Share Experiences of Menopause Across Generations**. CSCW'24. ⚯

P8 **S. Chopra**, J. Carroll, J. Pater: **Providing Context to the "Unknown": Patient and Provider Reflections on Connecting Personal Tracking, Patient-Reported Insights, and EHR Data within a Post-COVID Clinic**. CSCW'24. ⚯

P7 J. Pater, **S. Chopra**, J. Zaccour, J. Carroll, F. F. Nova, T. Toscos, S. Guha, F. L. Chang: **Charting the COVID Long Haul Experience – A Longitudinal Exploration of Symptoms, Activity, and Clinical Adherence**. CHI'24. ⚯

P6 Y. S. Sefidgar, C. L. Castillo, **S. Chopra**, L. Jiang, T. Jones, A. Mittal, H. Ryu, J. Schroeder, A. Cole, N. Murinova, S. A. Munson, J. Fogarty: **MigraineTracker: Examining Patient Experiences with Goal-Directed Self-Tracking for a Chronic Health Condition**. CHI'24. ⚯

P5 **S. Chopra**, A. Beretta, M. Duran, K. I. López, J. A. Rojina, L. K. Ko, M. Rosenfeld, B. S. Wilfond, J. Fogarty, S. A. Kraft: **Developing a Resource for Supporting Community-Based Health Research: Towards Considerations for Advancing Equity in Mobile Health Technology**. CSCW'24 Poster. ⚯

P4 **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. ⚯

P3 **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. ⚯

P2 A. Tuli, **S. Chopra**, P. Singh, N. Kumar: **Menstrual (Im)Mobilities and Safe Spaces**. CHI'20. ⚯

P1 A. Tuli, **S. Chopra**, N. Kumar, P. Singh: **Learning from & with Menstrupedia: Towards Menstrual Health Education in India**. CSCW'18⚯

## Awards & Achievements

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| 2024 | **Best Paper Award**, Received at ACM CHI 2024. | |
| 2023 | **Grace Hopper Conference Scholarship**, Received UW CSE funding to attend GHC 2023 | |
| 2022 | **TAPIA Conference Scholarship**, Received UW CSE funding to attend TAPIA Conference 2022 | |
| 2021 | **Wissner-Slivka Endowed Graduate Fellowship**, UW CSE 1st year fellowship | |
| 2020 | **College of Information Studies Alumni Chapter Scholarship**, Exceptional UMD iSchool grad student award | |
| 2020 | **Grace Hopper Conference Scholarship**, Received UMD 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 | |

## Teaching Assistant Experience

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| CSE 512 | **Data Visualization**, with Jeffrey Heer at UW | *Spring 2025* |
| CSE 442 | **Data Visualization**, with Jeffrey Heer at UW | *Fall 2024* |
| CSE 512 | **Human Computer Interaction**, with James Fogarty at UW | *Fall 2023* |
| CSE 440 | **Human Computer Interaction**, with Scott Ichikawa at UW | *Spring 2023* |
| INST 201 | **Information Science**, with M. R. Sauter at UMD | *Spring & Fall 2020* |

## Academic Service

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| 2025 | **Reviewer**, ACM Transactions on Computing for Healthcare (HEALTH) | |
| 2025 | **Reviewer**, ACM Transactions on Computer-Human Interaction (TOCHI) | |
| 2021-25 | **Reviewer**, ACM Conference on Human Factors in Computing (CHI) | |
| 2022-25 | **Reviewer**, ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) | |
| 2024-25 | **Reviewer**, ACM Designing Interactive Systems (DIS) | |
| 2022 | **Student Volunteer**, ACM Conference on Human Factors in Computing (CHI) | |
| 2021 | **Web Co-Chair**, ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) | |
| 2019 | **Student Volunteer**, Conference on Information & Communication Technologies and Development (ICTD) | |