Sang-Wha Sien

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Research Interests

My interests lie in the intersection of inclusive & accessible designs, health informatics, wellbeing, culture, and the intricate needs of diverse users to foster digital citizenship.

Education

University of British Columbia | Vancouver, BC, Canada
PhD in Computer Science (HCI) — *Sep 2019 - Dec 2024 expected*

University of Washington | Seattle, WA, USA
M.S. in Human Centered Design and Engineering (HCDE) GPA 3.97 — *Sep 2015 - Jun 2018*
B.S. in Computer Engineering GPA 3.72 — *Sep 2010 - Dec 2014*

Work Experience

University of British Columbia | Vancouver, BC, Canada

GRADUATE RESEARCH ASSISTANT - EDAPT LAB — *Sep 2019 - present*
Supervisor: Dr. Joanna McGrenere
Thesis Committee: Drs. Skye Barbic, Stephen Heine, Dongwook Yoon
Doctoral Thesis - Designing for accessibility of mental health technologies

- Participated at CHI 2023 Doctoral Consortium
- Qualitatively explored minority students' perceptions and barriers with mental health technologies - methods: semi-structured interviews, Speed Dating method, thematic analysis ■ Paper CHI 2022
- Codesigned with international students and campus mental health experts - methods: collaborative persona development, remote co-design sessions, analysis that produced design dimensions, developed medium-fidelity mockups, survey feedback on the mockups ■ Paper CSCW 2023
- Current project: design, implementation, evaluation of a novel storytelling social support platform for students to inclusively participate in an online health community - methods: Figma prototyping, diary study, interviews, analysis using Nvivo

UX RESEARCH AND DESIGN LEAD - UBC SCHOOL OF NURSING — *Apr 2022 - present*
Principal Investigators: Drs. Kristen Haase & Leanne Currie
Designing technology-assisted aids for older adults to self-manage their cancer diagnoses and other comorbidities

- Led a team to iteratively develop a prototype (Sketch, Figma, Axure) based on prior research and continuous interactions with patient partners
- Evaluations with 20 older adults living with cancer, caregivers, clinicians ■ Paper in preprint JMIR Aging
- Currently working as a consultant during the iOS app development

VISITING PHD STUDENT RESEARCHER - NORTHUMBRIA UNIVERSITY — *May - July 2023*
Principal Investigator: Dr. Dawn Branley-Bell (PaCT Lab)
Remote Intervention to Improve Chewing Efficiency (RIICE)

- Collaborated with Northumbria researchers in Psych and Comp Sci to design an

intervention to measure, track and maintain/improve their chewing efficiency.
- Prototyped several designs on user facing data to create workbooks to be used for participatory design workshops
- Led design workshops on brainstorming/prototyping with Northumbria researchers
- Currently working as a consultant

GRADUATE TEACHING ASSISTANT - HCI

- Methods of Research and Evaluation in Information Organizations (LIBR 507) *Dec-Apr 2023*
- Human-Computer Interaction (CPSC 544) *Sep-Dec 2020-2022*
- Advanced Methods for Human-Computer Interaction (CPSC 444) *Jan-Apr 2020*
- Computers and Society (CPSC 430) *Sep-Dec 2019*

University of Washington | Seattle, WA, USA

GRADUATE RESEARCH ASSISTANT - HCDE *Mar 2016 - Sep 2019*

- **Family sleep health informatics** (with *Dr. Laura Pina*): explored how families navigated technologies for sleep and other health tracking - methods: family interviews and participatory design with young children ■ Paper CHI 2017
- **Family sleep health informatics** (with *Dr. Pina*): designed, implemented, & deployed a technology probe to understand how families track sleep together - methods: interviews with families who used the probe for 15-50 days ■ Paper CSCW 2020
- **User perceptions of sleep sensors** (with *Drs. Pina, R. Ravichandran*) - methods: expert interviews, surveys, product reviews ■ Paper CHI 2017
- **Collaborative social planning with multiple organizers** (with *Dr. Ray Hong*) - methods: diary study, interviews ■ Paper CSCW 2019

Publications

https://dl.acm.org/profile/99659130655
https://orcid.org/0000-0001-5956-9080

2017 Laura R. Pina, **Sang-Wha Sien**, Teresa Ward, Jason C. Yip, Sean A. Munson, James Fogarty, and Julie A. Kientz. 2017. From Personal Informatics to Family Informatics: Understanding Family Practices around Health Monitoring. In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17). Association for Computing Machinery, New York, NY, USA, 2300–2315. https://doi.org/10.1145/2998181.2998362

Ruth Ravichandran, **Sang-Wha Sien**, Shwetak N. Patel, Julie A. Kientz, and Laura R. Pina. 2017. Making Sense of Sleep Sensors: How Sleep Sensing Technologies Support and Undermine Sleep Health. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17). Association for Computing Machinery, New York, NY, USA, 6864–6875. https://doi.org/10.1145/3025453.3025557

2019 Sungsoo (Ray) Hong, Minhyang (Mia) Suh, Tae Soo Kim, Irina Smoke, **Sang-Wha Sien**, Janet Ng, Mark Zachry, and Juho Kim. 2019. Design for Collaborative Information-Seeking: Understanding User Challenges and Deploying Collaborative Dynamic Queries. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 106 (November 2019), 24 pages. https://doi.org/10.1145/3359208

2020 Laura Pina, **Sang-Wha Sien**, Clarissa Song, Teresa M. Ward, James Fogarty, Sean A. Munson, and Julie A. Kientz. 2020. DreamCatcher: Exploring How Parents and School-Age Children can Track and Review Sleep Information Together. Proc. ACM Hum.-Comput. Interact. 4, CSCW1, Article 70 (May 2020), 25 pages. https://doi.org/10.1145/3392882

2022 **Sang-Wha Sien**, Shalini Mohan, and Joanna McGrenere. 2022. Exploring Design Opportunities for Supporting Mental Wellbeing Among East Asian University Students in Canada. In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22). Association for Computing Machinery, New York, NY, USA, Article 330, 1–16. https://doi.org/10.1145/3491102.3517710

2023 **Sang-Wha Sien.** 2023. Designing for Inclusivity and Accessibility of Mental Health Technologies. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 492, 1–4. https://doi.org/10.1145/3544549.3577038

Sang-Wha Sien, Jessica Y. Ahn, and Joanna McGrenere. 2023. Co-designing Mental Health Technologies with International University Students in Canada. Proc. ACM Hum.-Comput. Interact. 7, CSCW2, Article 258 (October 2023), 25 pages. https://doi.org/10.1145/3610049

Sien SW, Kobekyaa FK, Puts M, Currie L, Tompson M, Hedges P, McGrenere J, Mariano C, Haase K, A tailored self-management app to support older adults with cancer and multi-morbidities: Development and Usability Testing. JMIR Preprints. https://doi.org/10.2196/preprints.53163

Awards and Honors

HCDE Capstone Showcase 2018 Best in Show | University of Washington
Designing for People DFP 2019 Graduate Entrance Grant Award | University of British Columbia
DFP CREATE Design Showcase 2021 Best Poster | University of British Columbia
DFP CREATE Design Showcase 2022 Best Poster | University of British Columbia
UBC Computer Science 2022 Best Teaching Assistant | University of British Columbia

Extracurriculars

UBC CS MUX Demo Czar	*Oct 2023 - present*
ACM CHI 2023 poster | Hamburg, Germany	*Apr 2023*
CAN-CWIC 2022 attendee | Toronto, ON, Canada	*Oct 2022*
ACM CSCW (2023) reviewer	*Aug 2022*
ACM CHI 2022 Student Volunteer | New Orleans, LA, USA	*May 2022*
ACM CHI 2022 reviewer	*2021*
ACM CHI 2020 reviewer	*2019*
DFP Executive Committee Student Volunteer | University of British Columbia	*Sep 2021 - Apr 2022*
CS Grad Wellbeing Representative | University of British Columbia	*Sep 2019 - Aug 2020*

Mentoring Experience

Ireena Baro (UBC undergrad in Computer Science)	*Oct 2022 - Aug 2023*
Francis Kobekyaa (UBC PhD student in Nursing)	*Apr 2022 - Aug 2023*
Jessica Ahn (UBC research assistant in Educational Psychology and Special Education)	*Mar - Dec 2021*
Edward Lin (UBC undergrad in Cognitive Systems)	*Jan-Sep 2021*
Shalini Mohan (UBC undergrad in Cognitive Systems)	*Jan-Sep 2020*