

Bridging Gaps in HCI: Advancing Education, Research, and Careers in Asia

Dilrukshi Gamage* Department of Computation and Intelligent Systems University of Colombo School of Computing Colombo, Sri Lanka dgs@ucsc.cmb.ac.lk

Zhicong Lu* Department of Computer Science City University of Hong Kong Hong Kong, China zhiconlu@cityu.edu.hk Shiwei Cheng* Zhejiang University of Technology Hangzhou, China swchengzjut@gmail.com

Shengdong Zhao School of Creative Media City University of Hong Kong Hong Kong, China shengdong.zhao@cityu.edu.hk

Xiaojuan Ma Hong Kong University of Science and Technology Hong Kong, Hong Kong mxj@cse.ust.hk Uichin Lee School of Computing KAIST Daejeon, Republic of Korea uclee@kaist.edu Preeti Mudliar* International Institute of Information Technology Bangalore Bangalore, India preetimudliar@gmail.com

Nova Ahmed Design Inclusion and Access Lab, Department of Electrical and Computer Engineering North South University Dhaka, Dhaka, Bangladesh nova.ahmed@northsouth.edu

> Ding Wang Google Atlanta, Georgia, USA ding.w9911@gmail.com

Abstract

Asia's Human-Computer Interaction (HCI) landscape is rapidly evolving, yet it faces distinct challenges in curriculum development, research establishment, and career navigation. This panel discussion, hosted by Asia SIGCHI Committee (ASC) at CHI2025, will bring together distinguished experts to address these challenges and explore strategies for fostering a robust and inclusive HCI community in Asia. Panelists will discuss the integration of culturally relevant content in HCI education, approaches to enhancing research visibility on international platforms, and initiatives to bridge gaps between academic training and industry expectations. Through an engaging discussion and audience interaction, the panel aims to identify actionable solutions, promote collaboration, and inspire future initiatives that strengthen HCI's growth across the region. Participants will gain valuable insights into overcoming systemic barriers while building sustainable and impactful HCI programs tailored to Asia's unique sociocultural dynamics. This panel seeks to advance the global relevance and contributions of HCI in Asia.

 * On behalf of the Asia SIGCHI Committee https://sigchi.org/people/committees/asia-committee/.

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CCS Concepts

Human-centered computing → Social recommendation;
General and reference → General conference proceedings;
Social and professional topics → Cultural characteristics;
Computing education.

Keywords

Asia, HCI, Curricula, HCI Education, HCI Teaching

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1 Introduction

Human-Computer Interaction (HCI) in Asia is experiencing significant growth, yet it encounters distinct challenges in curriculum development, research establishment, and career navigation. These challenges are critical to address in order to foster a robust HCI community that can effectively contribute to both local and global contexts. The ACM Asia SIGCHI Committee (ASC) intends to host a panel discussion at CHI2025 addressing some unique challenges faced by the Human-Computer Interaction (HCI) community in Asia, particularly in the following areas:

1.1 HCI Curriculum Development in Asia

The development of HCI curricula in Asia faces obstacles related to the integration of culturally relevant content and pedagogical approaches. Many academic institutions continue to adopt westerncentric models that may not fully resonate with the diverse sociocultural landscapes in Asian countries. The Asian CHI Symposium emphasizes the need for educational frameworks that incorporate local contexts and cultural nuances into HCI education, thus promoting culturally inclusive design practices [3, 7]. This shift is essential for preparing students to engage with technology in ways that reflect their unique cultural identities and user needs, ultimately enhancing the relevance and applicability of HCI studies in the region.

Since the academic landscape in Asia is characterized by a limited number of dedicated HCI programs, it is leading to a brain drain and hindering the formation of regional centers of excellence. A focused panel can bring together educators, researchers, and industry professionals to discuss strategies for developing robust HCI curricula that are culturally relevant and aligned with local needs. This collaborative effort can help articulate the barriers to establishing HCI programs and explore potential solutions, as highlighted in recent discussions emphasizing the importance of context-aware education in the region [6].

1.2 HCI Research Establishment in Asia

Establishing a strong research foundation in HCI within Asia is another pressing challenge. Although there has been an increase in research output, there is a lack of visibility and recognition for Asian researchers on international platforms. Initiatives like the Asian CHI Symposium aim to create a collaborative environment to share knowledge and foster connections among researchers, practitioners, and students. This platform not only showcases local research, but also addresses historical inequities in technology design and representation, advocating for a more equitable research landscape that values diverse perspectives. By promoting interdisciplinary collaboration and culturally relevant methodologies, the region can enhance its contributions to the global HCI discourse.

A panel discussion can serve as a forum for sharing insights and experiences from researchers who have successfully navigated the complexities of conducting HCI research in diverse cultural settings. By facilitating dialogue among experienced academics and emerging researchers, the panel can address the historical inequities in technology design and representation, advocating for inclusive research practices that reflect the region's unique sociocultural dynamics. This aligns with ongoing efforts to create collaborative environments that foster impactful HCI research across Asia [1]

1.3 Career Navigation with HCI in Asia

Navigating careers in HCI can be particularly challenging for emerging professionals in Asia due to limited industry connections and mentorship opportunities. The disparity between academic training and industry expectations often leaves graduates unprepared for the job market. Programs like those initiated by ArabHCI highlight the importance of mentorship and support systems tailored to local contexts, which can help bridge this gap [5]. Furthermore, fostering networks among professionals through events such as the HCI for South Asia [4], and Asian CHI Symposium can provide valuable insights into career paths and industry trends, empowering individuals to navigate their careers more effectively within the evolving landscape of HCI. Addressing these career navigation challenges is crucial for retaining talent and promoting sustainable growth within the HCI field in Asia.

This panel at CHI2025 can provide a platform for discussing best practices in career development within the HCI field, focusing on mentoring programs and networking strategies tailored to local contexts. By bringing together industry leaders and educators, this panel can facilitate knowledge sharing about career paths and industry trends, empowering individuals to effectively navigate their careers in an evolving landscape. Addressing these career navigation challenges is crucial to retain talent and promote sustainable growth within the HCI community in Asia [2].

2 Propose Panel structure and Format

To effectively address the unique challenges faced by the Human-Computer Interaction (HCI) community in Asia, we present a panel that initiates a meaningful dialog to address these three key challenges we mentioned. Below is a suggested outline for the panel discussion:

2.1 **Pre-Panel Activities**

In the weeks leading up to the conference, the panel will be advertised on social media and mailing lists. Organizers will also solicit questions and provocations from our ASC and team across Asia in the CHI community, which will be curated and shared with panelists prior to the conference. We will use our social media handle @sigchi_asc to spread the word.

2.2 Panel Structure and Activities

- **Panelists:** Five distinguished experts representing South and East Asia, with diverse backgrounds in practicing HCI.
- **Moderator:** A seasoned HCI professional with experience in the Asian context.
- **Facilitators:** Three facilitators from Asia SIGCHI Subcommittee will be taking down notes and helping the Q and A session.
- **Discussion Topics:** Challenges in HCI curriculum development and adaptation in Asian universities.

Strategies for establishing and sustaining HCI research programs in resource-limited environments.

- Opportunities for academic-industry collaboration on HCI in Asia.
- Career pathways and mentorship for aspiring HCI professionals in the region.
- Addressing systemic gaps and fostering exclusivity in the Asian HCI landscape.
- Audience Interaction: Q&A session to encourage active participation and exchange of ideas.

2.3 Biographies of the Panelists and the Moderator

• P1: Shengdong Zhao: is a Professor in the School of Creative Media and the Department of Computer Science at City University of Hong Kong. He established and led the Synteraction (formerly NUS-HCI) research lab in 2009 at the National University of Singapore. Prof. Zhao received his Ph.D. in Computer Science from the University of Toronto and a Master's degree in Information Management Systems from the University of California, Berkeley. With extensive experience in developing innovative interface tools and applications, Prof. Zhao is a regular contributor to top-tier HCI conferences and journals like CHI, ToCHI, Ubicomp/IMWUT, CSCW, UIST, and IUI. He served as a senior consultant with Huawei Consumer Business Group in 2017. An active member of the HCI community, Prof. Zhao serves on program committees for major HCI conferences and was the paper co-chair for ACM SIGCHI conference in 2019 and 2020, and is the paper co-chair for ACM UIST conference in 2025. Prof. Zhao introduced the concept of Heads-up Computing in 2017, contributing to several key projects and publications in this area, including a featured article on heads-up computing in the September 2023 issue of Communications of the ACM. His research aims to develop innovative interface tools that enhance daily life through this new interaction paradigm. For more information about his work, please visit www.shengdongzhao.com.

- P2: Nova Ahmed is an Associate Professor at North South University. She has completed her PhD from Georgia Institute of Technology in 2010 and has come back to Bangladesh to serve her country. She has deep interest in working with distributed sensing systems with unreliable sensors while her passion has driven her to work on social problems that has lead to interesting human centered computing. Her passion is on empowering women in STEM, women in computing and in ensuring social justice using science and enlightenment. Her research interest lies in systems, ICTD and Feminist HCI. When she is not busy with her outreach activities, she spends her time with her two daughters and partner all are feminist activists. Nova is a founding member and EC of National Young Academy Bangladesh (NYAB), EC of Global Young Academy, Fellow of Sangat, the feminist network in South Asia, founding board member of Kaan Pete Roi. She is an active volunteer of Bangladesh Mathematical Olympiad, Children's Science Congress and Missing Daughter's Initiative. She is the Chair of SIGCHI, Dhaka Chapter in Bangladesh. She serves in SIGCHI Cares committee and is a current member of Asian HCI.
- **P3: Xiaojuan Ma:** is an associate professor of Human- Computer Interaction (HCI) at the Department of Computer Science and Engineering (CSE), the Hong Kong University of Science and Technology (HKUST). Dr. Ma received the Ph.D. degree in Computer Science at Princeton University. She was a post-doctoral researcher at the Human-Computer Interaction Institute (HCII) of Carnegie Mellon University (CMU), and before that a research fellow in the National University of Singapore (NUS) in the Information Systems department. Before joining HKUST, she was a researcher of Human-Computer Interaction at Noah's Ark Lab in Hong Kong. Her background is in Human-Computer Interaction. She is particularly interested in data-driven human-engaged

computing in the domain of affective, ubiquitous, social, and crowd computing as well as Human-AI Interaction. She is currently a paper co-chair of ACM CSCW 2025, and was the general co-chair of ACM MobileHCI 2022, co-editor of ACM CSCW 2023 and 2024, subcommittee co-chair of ACM CHI 2022, 2023, and 2025, and SIG co-chair of ACM CHI 2021.

- P4: Uichin Lee: is a professor in the School of Computing at the Korea Advanced Institute of Science and Technology (KAIST), leading the Interactive Computing Lab, whose mission is to study intelligent positive computing systems that can intervene in threats to human health and wellbeing. He received a Ph.D. degree in computer science from UCLA in 2008. He worked for Alcatel-Lucent Bell Labs as a member of the technical staff before joining KAIST in 2010. He has joint affiliations with the Department of Industrial and Systems Engineering, the Graduate School of Data Science at KAIST, and the KAIST Health Science Institute. In 2023, he was inducted as a member of the SIGCHI Academy. He served as a program committee member of the key HCI conferences and journals, such as ACM CHI, CSCW, and Ubicomp, and as an editor for PACM HCI (CSCW) and IMWUT (Ubicomp). He received the best paper awards at ACM Ubicomp'24 (PACM IMWUT), ACM CHI'16, AAAI ICWSM'13, IEEE CCGrid'11, and IEEE PerCom'07, and an impact award from IEEE IoT Fourm'19.
- P5: Ding Wang: is a senior researcher from Technology, AI, Society and Cultural Group at Google Research. Her research explores the intersection of HCI and AI, specifically the labor involved in data production and its impact on AI systems. Prior to joining Google, Ding completed her postdoc research at Microsoft Research India, where her projects focused on the future of work and healthcare. She received her PhD from the HighWire Centre for Doctoral Training at Lancaster University. Her doctoral thesis offers a critical/alternative view on how smart cities should be designed, developed, and evaluated. Ding serves in both SIGCHI Cares committee and SIGCHI Ethics committee. She has worked to support various SIGCHI winterschools in both Bangladesh and Sri Lanka. Ding also served at associate chairs for various subcommittees at ACM CHI, ACM CSCW and FAccT conference.
- Moderator: Drilrukshi Gamage: is a senior lecturer at the University of Colombo School of Computing in Sri Lanka. After serving as postdoctoral research fellow at the Sasahara Labs at Tokyo Institute of Technology, Japan, Dilrukshi returned to her home country in populating HCI research in the South Asia. Her research intersect with Computational Social Science and Human Computer Interactions. She is a recipient of Google WTM scholarship, Young Researcher at the Heidelberg Laureate Forum and ACM-W scholarship.

3 Plan of activities during the Panel Discussion

1. Panel Overview (10 minutes) Introduction of the Topic: Briefly describe the importance of HCI in Asia and the specific challenges in curriculum development, research establishment, and career navigation. Objectives of the Panel: Clearly state the goals of the discussion, such as identifying challenges, sharing best practices, and proposing actionable solutions.

- 2. Introductions of panelists (10 min) Diverse representation: Introduce panelists from various backgrounds, including educators, researchers, industry professionals, and students to provide a well-rounded perspective. Backgrounds and Expertise: Each panelist shares a brief overview of their experience related to HCI in Asia.
- 3. Discussion Segments (30 minutes total)(1) Segment 1: Curriculum Development (10 minutes) Discuss current challenges in HCI education in Asia. Explore successful case studies or innovative curricula that have been implemented. Encourage panelists to share insights on culturally relevant education practices.
- (2) Segment 2: Research Establishment (10 minutes) Address barriers to conducting impactful HCI research in diverse cultural contexts. Highlight successful collaborations or initiatives that have enhanced research visibility. Discuss strategies for fostering inclusive research practices that reflect local needs.
- (3) Segment 3: Career Navigation (10 minutes) Explore challenges faced by emerging professionals in the HCI field. Share insights on effective mentorship programs and networking opportunities. Discuss how to bridge the gap between academic training and industry expectations.
- **4. Audience Engagement (20 minutes)** Q&A Session: Open the floor for questions from the audience to encourage interaction and deeper exploration of the topics discussed. Interactive Polls or Surveys: We will use a shared doc link to gather real-time feedback from participants on key issues related to HCI in Asia.
- **5. Actionable Outcomes (15 minutes)** Summary of Key Takeaways: Each panelist highlights one actionable takeaway from their segment that can be implemented by attendees. Call to Action: Encourage participants to collaborate on initiatives that address identified challenges, such as forming working groups or networks.
- **6.** Closing Remarks (5 minutes) Thank panelists and attendees for their participation. Provide information on followup resources or platforms for continued discussion beyond CHI2025.

4 Expected outcomes and Conclusion

This panel proposal is a key initiative by the Asia SIGCHI Subcommmttee members. All authors contributed equally in drafting the proposal together and will be assisting the panel discussion on site. The panel discussion promises to be a thought-provoking and informative exploration of HCI career navigation in Asia. By bringing together diverse perspectives and experiences, we aim to contribute to the growth and development of the HCI field in this dynamic region. We hope to achieve the following outcomes as long-term goals.

- Increased awareness of the unique challenges and opportunities in Asian HCI careers.

- Practical insights and strategies to navigate HCI career pathways in the region.
- Fostering a sense of community and collaboration among HCI professionals in Asia.
- Inspiration for future HCI initiatives and research in the region.

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