



AIS SIGHCI Newsletter

Association for Information Systems
Special Interest Group on Human Computer Interaction

Volume 21 Issue 1

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A Message from the Chair

Dear fellow SIGHCI members and friends,

We have had an extremely busy period since the last newsletter. Most of us are slowly getting back to campus and the students are also trickling back into classes. There is an adjustment period but hopefully, we can get back to normal very soon. Our SIGHCI team is strongly committed to serving our community and we will ramp up the preparation for our annual SIGHCI workshop in Copenhagen very soon. Thus far, we have completed milestones and achievements as listed below:

- SIGHCI-sponsored events at ICIS, HICSS, and AMCIS
- SIGHCI social media continue to feature regular, high-quality posts, including featured research from our community!
- The 2021 pre-ICIS Workshop was a success!
- Hosted an Industry Keynote and a Closing (Academic) Keynote!
- 3% increase in members

I am beginning my second term as the chair for the AIS SIGHCI. I must reiterate my appreciation of the support of our members as we work together to ensure that our SIGHCI remains relevant and serves an important function within the AIS and the academic community in general. The executive board members have remained largely unchanged, and it is time we start thinking about an injection of new blood into our board and governance team. This is not an indictment on our current governance team but rather a call for stronger support of our community with a clear succession plan so that we can do more and make a bigger impact. I would like to encourage individuals who are passionate about serving our community to consider nominating themselves or someone else for governance roles within the SIGHCI. Come talk with me or any of us in the board to learn about the different portfolios and how you could be involved.

Over this period, our virtual presence on the various social media platforms have grown significantly. Julie Kang, who is our chief social media manager and strategist, has greatly increased our community’s visibility on Twitter, Facebook, and LinkedIn. We are also increasing our presence into the web3 environment with the issuance of the first series of our award NFTs on the Cardano Blockchain. Fiona Nah our EIC of AIS Transactions on Human-Computer Interaction has also initiated a special issue that will kickstart research into the metaverse. Our SIGHCI remains committed to high quality scientific research and teaching and we will let science be the front and center of our identity.

Best Wishes,

Eric Lim
AIS SIGHCI Chair



AIS SIGHCI One-Year Report: 7/2021 – 6/2022

Eric Lim, SIGHCI Chair (2021-2022)

with the assistance of SIGHCI advisors and officers

July 1, 2022

<http://www.sighci.org/>

SIGHCI is the Special Interest Group on Human Computer Interaction affiliated with the Association for Information Systems (AIS). The SIG was approved by the AIS council in Spring 2001 and was one of the first six SIGs announced on ISWorld in July 2001. Since then, SIGHCI has come to be the largest and one of the most active AIS SIGs.

1. MISSION & TOPICS

SIGHCI provides a forum for AIS members to discuss, develop, and promote a range of issues related to the history, reference disciplines, theories, practice, methodologies and techniques, new developments, and applications of the interaction between humans, information, technologies, and tasks, especially in the business, managerial, organizational, social, and cultural contexts. SIGHCI's mission is twofold:

- To facilitate the exchange, development, communication, and dissemination of information among AIS members.
- To promote research related to human-computer interaction within business, managerial, and organizational contexts among AIS members and to the larger community of practitioners and scholars.

To fulfill our mission, SIGHCI is involved in several conferences, workshops, and other endeavors. Activities and accomplishments of the SIG in the 2021-2022 year are included in Section 3 of this report.

2. OFFICERS, GOVERNANCE, AND BYLAWS

The Advisory Board members and officers serving from July 2021 to June 2022 were as follows:

Advisory Board

Dennis Galletta, University of Pittsburgh, galletta@katz.pitt.edu
Izak Benbasat, University of British Columbia, Izak.benbasat@sauder.ubc.ca
Fiona Fui-Hoon Nah, City University of Hong Kong, fiona.nah@cityu.edu.hk
Joe Valacich, University of Arizona, valacich@email.arizona.edu
Ping Zhang, Syracuse University, pzhang@syr.edu
Traci Hess, University of Massachusetts, Amherst, thess@isenberg.umass.edu
Dezhi Wu, University of South Carolina, dezhi.wu@gmail.com
Dianne Cyr, Beedie School of Business, Simon Fraser University, cyr@sfu.ca
Soussan Djamasbi, Worcester Polytechnic Institute, djamasbi@wpi.edu
Miguel Aguirre-Urreta, Texas Tech University, miguel.aguirre-urreta@ttu.edu
Zhenhui (Jack) Jiang, University of Hong Kong, jiangz@hku.hk
Gabe Lee, Miami University, gabelee@miamioh.edu

Greg Moody, University of Nevada-Las Vegas, greg.moody@unlv.edu

Chair

Eric Lim, University of New South Wales Sydney, e.t.lim@unsw.edu.au (7/21-6/23)

Past Chair

Constantinos K. Coursaris, HEC Montréal, coursaris@hec.ca (7/21-6/23)

Secretary and Treasurer

Anna McNab, Niagara University, amcnab@niagara.edu (7/14-6/24)

Advisory Board Chair

Dennis Galletta, University of Pittsburgh, galletta@katz.pitt.edu (2/14-6/23)

Vice Chair for Sponsorship

Jinwei Cao, University of Delaware, jcao@udel.edu (7/16-6/23)

Vice Chair for Research Resources

Wietske Van Osch, HEC Montréal, vanosch@hec.ca (7/19-6/23)

Vice Chair for Teaching Resources

Ulrich Gnewuch, Karlsruhe Institute of Technology, ulrich.gnewuch@kit.edu (1/20-12/23)

Vice Chair for Marketing

Pei-Hsuan Hsieh, National Chengchi University, hsiehph@nccu.edu.tw (7/21-6/23)

Vice Chair for Membership

Prateek Jain, Worcester Polytechnic Institute, pjain@wpi.edu (7/18-6/23)

Listserv Manager

Ping Zhang, Syracuse University, pzhang@syr.edu (7/05-6/22)

Newsletter Editor

Prateek Jain, Worcester Polytechnic Institute, pjain@wpi.edu (7/18-6/23)

Webmaster

Ulrich Gnewuch, Karlsruhe Institute of Technology, ulrich.gnewuch@kit.edu (1/20-6/23)

Social Media Manager

Roxana Jimenez, HEC Montréal, roxana.jimenez@hec.ca (10/20-12/21)

Ju-Yeon (Julie) Kang, HEC Montréal, ju-yeon.kang@hec.ca (11/21-12/22)



AIS SIGHCI One-Year Report: 7/2021 – 6/2022

Student Ambassadors

Region 1 (Americas) – Fatima Varzgani, Worcester Polytechnic Institute, fvarzgani@wpi.edu (7/20-6/22), Long The Nguyen, University of Massachusetts Amherst, longtnguyen@som.umass.edu (7/21-6/22)

Region 2 (Europe, Africa, The Middle East) – Marcel Ruoff, Karlsruhe Institute of Technology, marcel.ruoff@kit.edu (7/21-6/22)

Region 3 (Asia, Pacific) – Zhiyin Li, Nanyang Technological University, ZHIYIN001@e.ntu.edu.sg (7/21-6/22), Feiyan Jia, City University of Hong Kong, feiyanjia2-c@my.cityu.edu.hk (7/21-6/22), Yue Cheng, Peking University, yuecheng@pku.edu.cn (7/21-6/22)

Conference and Track Chairs

Conference Co-Track Chair for ECIS 2022

Stefan Morana, Saarland University, Germany

(stefan.morana@uni-saarland.de)

Marc Adam, The University of Newcastle

(marc.adam@newcastle.edu.au)

Alan Hevner, University of South Florida (ahevner@usf.edu)

Shirley Gregor, Australian National University

(shirley.gregor@anu.edu.au)

Conference Co-Mini-Track Chair for HICSS 2022

Christoph Schneider, University of Navarra

(cschneider@iese.edu)

Joe Valacich, University of Arizona (valacich@arizona.edu)

Jeffrey Jenkins, Brigham Young University

(jeffrey_jenkins@byu.edu)

Workshop Co-Chair for Pre-ICIS HCI Workshop 2021

Constantinos K. Coursaris, HEC Montréal

(constantinos.coursaris@hec.ca)

Eric T. K. Lim, UNSW Sydney (e.t.lim@unsw.edu.au)

Conference Co-Track Chair for ICIS 2021

Lionel P. Robert Jr., University of Michigan

(lprobert@umich.edu)

Douglas C. Derrick, University of Nebraska at Omaha

(dcderrick@unomaha.edu)

Shuk Ying (Susanna) Ho, The Australian National University

(susanna.ho@anu.edu.au)

Conference Co-Track Chair for AMCIS 2021

Miguel I. Aguirre-Urreta, Florida International University

(miguel.aguirreurreta@fiu.edu)

Dezhi Wu, University of South Carolina (dezhiwu@cec.sc.edu)

Jeff Jenkins, Brigham Young University

(jeffrey_jenkins@byu.edu)

Conference Co-Chair for HCI in Business, Government and Organizations at HCII 2021

Fiona Fui-Hoon Nah, City University of Hong Kong

(fiona.nah@cityu.edu.hk)

Keng Siau, City University of Hong Kong (klsiau@cityu.edu.hk)

3. ACTIVITIES & ACCOMPLISHMENTS

3.1. AIS Outstanding SIG Award

Due to the high level of interest and support from enthusiastic SIG members and the hard work of the organizing team, SIGHCI continues to be **the largest** and certainly among, if not the most active AIS SIGs. SIGHCI is among the 36 AIS Communities to earn the designation of Outstanding SIG, Chapter, or College for 2021. The communities receiving the Outstanding SIG, Chapter, or College recognition excelled in operations, member communications, education and/or professional development events, and research publications. Read the full announcement by the AIS here: <https://aisnet.org/news/605940/Congratulations-to-the-AIS-Outstanding-Communities-for-2021.htm>.

3.2. Identity and Community Building

In keeping with its mission, SIGHCI continues to advance the goal of building a community of scholars who share common interests and who appreciate and help develop each other's work. Our membership roster has 333 current (i.e., paid) members as of September 2022. The membership has a global impact representing six continents and nearly 50 countries. The SIG continues to work with AIS to integrate SIG membership renewals with general conference registrations and AIS membership renewals. This integration should result in a greater number of current (paid) members.

3.3. Communications and Outreach

In the past year, we have continued to promote awareness of SIGHCI, to extend the identity and reputation of SIGHCI, and to promote dialogs with the MIS community and other related external parties. These activities are carried out using four levels of communication (see prior years' reports for details): SIG-wide communication, promotion of HCI in the I.S. community, dialog with other HCI-related associations (including ACM SIGCHI and IFIP TC13), and connections with industry. In an effort to further support our members and the HCI community, all SIGHCI workshop papers from 2003 are made available through the AIS e-Library at <http://aisel.aisnet.org/sighci/>.

In addition, the SIGHCI listserv was created as a broadcast medium for MIS and HCI researchers, doctoral students, and practitioners in 2001. It is open to both SIGHCI members and non-members. As of September 28, 2022, it has 399 subscribers from across the world.

An AIS SIGHCI group was created on LinkedIn in 2008, currently reaching 778 members. The AIS SIGHCI LinkedIn Profile has 226 members, and the SIGHCI Facebook Page now connects with 479 Fans and 521 Followers. Similarly, the SIGHCI Twitter account now reaches 168 Followers. The AIS SIGHCI social media accounts connect and regularly update our AIS SIGHCI members with trending research in HCI along with information on the annual Pre-ICIS workshop and events from other AIS special interest groups. Also, since 2014, the HCI in Business (HCIB) International Conference affiliated with HCI International (HCII) Conference has joined a number of social media for researchers and practitioners to connect on Facebook, Twitter, and Google+.



AIS SIGHCI One-Year Report: 7/2021 – 6/2022

3.4. SIGHCI Sponsored Conferences/Meetings

SIGHCI's regularly sponsored conferences were held again during the past year. Specifically, SIGHCI has sponsored and organized the annual Pre-ICIS Workshop on HCI Research in MIS since 2002. SIGHCI also participates in the following conferences: HCI track at AMCIS since 2002, HCI track at ECIS (European Conference on Information Systems) in 2006-2007, 2011-2014, 2016, 2019, and 2020, paper sessions at HCII (HCI International Conference) since 2005, International Conference on HCI in Business (HCIB) affiliated with HCII since 2014, HCI mini track at HICSS beginning in 2007, HCI track at ICIS since 2004, and HCI track at PACIS since 2005.

3.5. SIGHCI Annual Election

No elections were held in 2021, as all Board Members were in the middle of serving their two-year mandates. Elections will be announced according to the bylaws and the corresponding timeline, i.e., in Spring 2023, by Past-Chair Constantinos Coursaris via the SIGHCI listserv. Nominations and self-nominations will be solicited for the positions whose current Board Members' terms are ending on June 30, 2023, and do not plan to renew their respective roles or have been vacated in the interim. Online voting will take place in May or June allowing members to vote for their preferred candidates. Participation in and results of the next elections will be reported in the Fall 2023 newsletter issue. It is anticipated that the available positions in next year's elections will include:

- Chair (as current Chair, Eri Lim, will transition to the role of Past Chair effective 7/23)
- VP Sponsorship (as the term of current VP, Jinwei Cao, will be ending in 12/22)
- VP Membership (as the term of current VP, Prateek Jain, will be ending in 6/23)
- Student Ambassadors (to replace any graduating)

4. SERVICES TO MEMBERS & COMMUNITIES

SIGHCI provides a range of services to its members (visit the

SIGHCI website, <http://www.sighci.org/>, for more information about these services). The website has information about every aspect of SIGHCI, including the mission, bylaws, membership, listserv, conferences, newsletters, photo gallery, HCI related journals, research resources, teaching resources, and SIGHCI officers and contacts. In order to provide greater access to research materials to our members and the SIGHCI community, all SIGHCI workshop papers from 2003 onwards were made available through the AIS e-Library at <http://aisel.aisnet.org/sighci>.

5. FINANCIAL MATTERS

SIGHCI accounting records, which are maintained by AIS show that as of July 2021, the SIG had a starting balance of \$55,583.50 for the fiscal year 2021/2022. The income and expenses for the past fiscal year are listed in Table 1. The balance has increased by \$21,933.39 since the beginning of the year. The positive change in balance was primarily due to corporate sponsorships SIGHCI received thanks to revamped sponsorship packages and the introduction of a new category of sponsorship. A task force comprising Dr. Jinwei Cao (Vice Chair for Sponsorship), Social Media Managers (Roxanna Jimenez and Sarah Cosby), and Past Chair (Constantinos Coursaris), with input from the full Board, led the creation of these sponsorship packages that have attracted our corporate sponsors.

6. LOOKING FORWARD

Since its inception in 2001, our SIG has made significant progress through the support of its Advisors, Executive Board, Officers, Board Members, general members, and sponsors. The cooperation and assistance of the AIS office, as well as the support of journal editors in encouraging HCI research in MIS, has been instrumental in SIGHCI's growth. It has been a great experience to work side by side with such a nice and involved group of colleagues and look forward to much future collaboration.

Table 1. Financial Report

Balance (7/1/2021)		\$55,583.50
Revenue		\$29,495
Membership Fees	\$3,865	
Workshop Registration	\$3,880	
Sponsorship	\$21,750	
Misc.	\$0	
Expenses		(\$7,561.61)
Conference (Meals, Equipment)	(\$3,364.42)	
Trophies and Awards	(\$620.58)	
Webhosting/Admin Fees	(\$36.12)	
Social Media/Graphic Design	(\$3,540.49)	
<u>Balance (6/30/2022)</u>		<u>\$77,516.89</u>



Review: Pre-ICIS Workshop on HCI Research in MIS at ICIS 2021

Pre-ICIS Workshop on HCI Research in MIS At the International Conference on Information Systems (ICIS 2021)

**Austin, Texas, USA (Hybrid Conference)
December 12, 2021**

Workshop Co-Chairs:

Constantinos K. Coursaris, HEC Montréal (constantinos.coursaris@hec.ca)
Eric T. K. Lim, UNSW Sydney (e.t.lim@unsw.edu.au)

Program Co-Chairs:

Brian Dunn, Utah State University (brian.dunn@usu.edu)
Mark Grimes, University of Houston (gmgrimes@bauer.uh.edu)
Chee-Wee Tan, Copenhagen Business School (ct.digi@cbs.dk)

The Pre-ICIS Workshop on HCI Research in MIS at the International Conference on Information Systems (ICIS2021) received 22 submissions of which 10 were completed research papers and 12 were research-in-progress papers. After a rigorous review process, the workshop accepted 6 completed research papers and 11 research-in-progress papers, giving an acceptance rate of 77%. We are extremely appreciative of the time and effort by everyone involved in making the workshop a success.



Review: Human Computer / Robot Interaction Track at ICIS 2021

Human Computer / Robot Interaction Track at the International Conference on Information Systems (ICIS 2021)

**Austin, Texas, USA
December 12 – 15, 2021**

Track Co-Chairs:

Lionel P. Robert Jr., University of Michigan (lprobert@umich.edu)
Douglas C. Derrick, University of Nebraska at Omaha (dcderrick@unomaha.edu)
Shuk Ying (Susanna) Ho, The Australian National University (susanna.ho@anu.edu.au)

The Human-Computer/Robot Interaction track received 57 submissions of which 30 were completed research papers and 27 were research-in-progress papers. After a rigorous review process, the track accepted 8 completed research papers and 8 research-in-progress papers, giving an acceptance rate of 28%. We are extremely appreciative of the time and effort of everyone involved in making the track a success.



Review: HCI in Digital Economy Mini-Track at HICSS 2022

Human Computer Interaction in Digital Economy Mini-Track At the Hawaii International Conference on System Sciences (HICSS 2022)

Kauai, Hawaii
January 4 – 7, 2022

Christoph Schneider, University of Navarra (cschneider@iese.edu)
Joe Valacich, University of Arizona (valacich@arizona.edu)
Jeffrey Jenkins, Brigham Young University (jeffrey_jenkins@byu.edu)

The Human-Computer Interaction in the Digital Economy, a mini-track for the 2022 Hawaii International Conference on Systems Sciences (HICSS), received 12 submissions. After a rigorous review process, the track accepted 6 completed research papers, giving an acceptance rate of 50%. We are extremely appreciative of the time and effort by everyone involved – authors, reviewers, and conference organizers – in making the mini-track a success.



Review: Design Research and Methods in IS Track at ECIS 2022

Design Research and Methods in Information Systems Track at European Conference on Information Systems (ECIS 2022)

Timisoara, Romania
June 18 – 24, 2022

Track Co-Chairs:

Stefan Morana, Saarland University, Germany (stefan.morana@uni-saarland.de)
Marc Adam, The University of Newcastle (marc.adam@newcastle.edu.au)
Alan Hevner, University of South Florida (ahevner@usf.edu)
Shirley Gregor, Australian National University (shirley.gregor@anu.edu.au)

The ECIS 2022 “Design Research and Methods in Information Systems” track attracted several high-quality submissions in the areas of design-oriented research, human-computer interaction, and methodological aspects of design research. Altogether, the track received 19 full research papers (RP) and 14 research in progress (RIP) papers. Of these, 6 RP and 4 RIP, respectively, were accepted (a 33% acceptance rate overall) and presented during the virtual conference.



Review: International Conference on HCIBGO at HCII 2022

International Conference on HCI in Business, Government and Organizations (HCIBGO) Affiliated with HCII 2022

Gothenburg, Sweden
June 26 – July 1, 2022

Conference Co-Chairs:

Fiona Fui-Hoon Nah, City University of Hong Kong (fiona.nah@cityu.edu.hk)
Keng Siau, City University of Hong Kong (klsiau@cityu.edu.hk)

The 9th Annual SIGHCI-sponsored International Conference on Human-Computer Interaction in Business, Government and Organizations (HCIBGO), which is an affiliate conference of the Human-Computer Interaction International (HCII) Conference, was held virtually on June 26 – July 1, 2022. Forty-nine papers were accepted and presented at the conference. Many thanks to the authors, reviewers, and attendees for making the conference a success.



Review: HCI and Robotic Interface Design Track at PACIS 2022

Human Computer Interaction Track at the Pacific Asia Conference on Information Systems (PACIS 2022)

Taipei/Sydney Virtual Conference
July 5 – 9, 2022

Track Co-Chairs:

Ben Choi, Nanyang Technological University (benchoi@ntu.edu.sg)
Lusi Yang, University of Arizona (lusiyang@email.arizona.edu)
Yi Wu, Tianjin University (yiwu@tju.edu.cn)

The “Human-Computer Interactions and Robotics Interface” Track at PACIS 2022 received 23 submissions of which 11 were completed research papers and 12 were research-in-progress papers. After a rigorous review process, the track accepted 8 completed research papers and 6 research-in-progress papers, giving an acceptance rate of 60.87%.



Review: HCI Track at AMCIS 2022

Human Computer Interaction Track at Americas Conference on Information Systems (AMCIS 2022)

Minneapolis, Minnesota, USA
August 10 – August 14, 2022

Track Co-Chairs:

Miguel I. Aguirre-Urreta, Florida International University (miguel.aguirreurreta@fiu.edu)
Dezhi Wu, University of South Carolina (dezhiwu@cec.sc.edu)
Jeff Jenkins, Brigham Young University (jeffrey_jenkins@byu.edu)

The AMCIS 2022 Human-Computer Interaction track received a total of 24 submissions, out of which 17 were completed research papers and 7 were research-in-progress (ERF) submissions. After a rigorous review process, the track accepted 12 completed research papers and 4 research-in-progress (ERF) submissions, giving an acceptance rate of 67%. We are extremely appreciative of the time and effort by everyone involved in making the track a success.



Future Activities Sponsored by AIS SIGHCI

Pre-ICIS Workshop on HCI Research in MIS At the International Conference on Information Systems (ICIS 2022)

Copenhagen, Denmark (Hybrid Conference)
December 11, 2022

Workshop Co-Chairs:

Constantinos K. Coursaris, HEC Montréal (constantinos.coursaris@hec.ca)
Eric T. K. Lim, UNSW Sydney (e.t.lim@unsw.edu.au)

Program Co-Chairs:

Mark Grimes, University of Houston (gmgrimes@bauer.uh.edu)
Chee-Wee Tan, Copenhagen Business School (ct.digi@cbs.dk)

For more details, please visit <https://sighci.org/conferences/2022-pre-icis-workshop/>

Human Computer / Robot Interaction Track at the International Conference on Information Systems (ICIS 2022)

Copenhagen, Denmark
December 9 – 14, 2022

Track Co-Chairs:

Kathrin Figl, University of Innsbruck (kathrin.figl@uibk.ac.at)
Weiyin Hong, Hong Kong University of Science and Technology (whong@ust.hk)
Traci Hess, University of Massachusetts, Amherst (thess@isenberg.umass.edu)

For more details, please visit <https://icis2022.aisconferences.org>



**Human Compute Interaction in Digital Economy Mini-Track
At the Hawaii International Conference on System Sciences (HICSS 2023)**

**Maui, Hawaii
January 3 – 6, 2023**

Christoph Schneider, University of Navarra (cschneider@iese.edu)
Joe Valacich, University of Arizona (valacich@arizona.edu)
Jeffrey Jenkins, Brigham Young University (jeffrey_jenkins@byu.edu)

For more details, please visit <https://hicss.hawaii.edu>



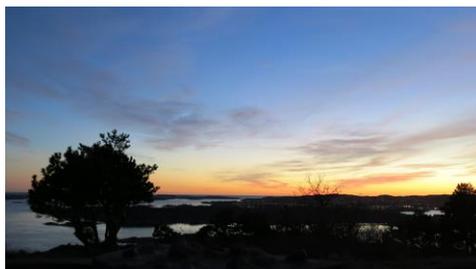
**Design Research and Methods in Information Systems Track
at European Conference on Information Systems (ECIS 2023)**

**Kristiansand, Norway
June 11 – 16, 2023**

Track Co-Chairs:

Stefan Morana, Saarland University, Germany (stefan.morana@uni-saarland.de)
Marc T.P. Adam, The University of Newcastle (marc.adam@newcastle.edu.au)
Monica Chiarini Tremblay, William & Mary (monica.tremblay@mason.wm.edu)

For more details, please visit <https://ecis2023.no>



Call for Chapters – THCI Book

THCI Book: “Intelligent Systems in the Workplace: Design, Applications, and User Experience”

Edited by Prof. Dr. Constantinos K. Coursaris, Prof. Dr. Pierre-Majorique Léger, Dr. Joerg Beringer

To be published by Springer

The book will consist of theoretical and applied viewpoints on users’ interactions with human-centered AI in organizational contexts of use, including case studies from multiple industries, and perspectives on the successful design of user experiences and the deployment of AI in the workplace. Further information on the call for papers can be found on our research chair’s website: <https://bit.ly/hcaibook>.

Topics of Interest:

We seek book chapters with original contributions including conceptual and/or empirical research, case studies, and applied perspectives that inform the design, development, deployment, and use of Intelligent Systems in the Workplace. Topics of interest include, but are not limited to those listed below:

1. Design of socially-embedded intelligent agents at workplaces

Stakeholder Requirements, User Control & Empowerment, AI Engagement Models and Meta Decisions, Mental Models and Identity of Intelligent Agents, Responsible AI, Privacy & Security, Governance

2. Applications of IA in Business

Strategic Role of Intelligent Systems, Business Requirements, Enabling Technologies, Use Contexts, Implementation and Life Cycle Management

3. User Experience & Ergonomics

Distributed Cognition & Situational Awareness, Automation and Autonomy, Decision-Making & Performance

4. Case Studies

Aeronautics, Automotive, Banking & Financial Services, Mobility/transportation, Healthcare, Insurance, Retail, Supply Chain, Demand Prediction

Interested authors should submit their book chapter proposal(s) by the corresponding deadline below via email to the book editors Constantinos K. Coursaris (constantinos.coursaris@hec.ca), Pierre-Majorique Léger (pml@hec.ca), Joerg Beringer (joerg.beringer@blueyonder.com), and the editorial manager Burak Oz (burak.oz@hec.ca). The proposal should include a description of the book chapter’s objective, scope and structure, and be submitted as an MS Word file, using Times New Roman 11-pt, and 1-inch margins all-around. Feedback on proposed chapters will be provided by this book’s editors.

Subsequent (book chapter) manuscript submissions will undergo a formal double-blind review process to ensure originality, relevance, quality, and impact. Manuscripts should not have been published elsewhere and should range between 3,000 and 5,000 words in length, should be submitted as MS Word documents with Times New Roman 11-pt., and 1-inch margins all-around.

Important dates:

- October 14 at 10AM EST: Information webinar
- November 15: Submission of book chapter proposal
- December 1: Feedback on submitted proposal
- February 15: Submission of complete manuscript (i.e., book chapter)
- March 15: Notification of peer-review decision and feedback
- April 15: Submission of updated, camera-ready manuscript
- Fall 2023 (est.): Publication of book

If you have any questions regarding this Call for Chapters, please feel free to contact any one of the three editors.

Multiple funded PhD and Postdoc Positions at HEC Montreal’s Tech3lab

Multiple funded PhD and Postdoc Positions in Information Systems, Marketing, and Data Sciences at HEC Montreal’s Tech3lab

The Tech3Lab (<https://tech3lab.hec.ca/en/>) at HEC Montréal (<https://www.hec.ca/>) is inviting applications for funded Ph.D. students (<https://www.hec.ca/en/programs/phd/index.html>) and Postdoc fellow positions in Data Science, Information Technology / Information Systems, and Marketing with a research focus on user experience.

By joining our team, you will be working in a highly collaborative and stimulating environment, strengthened by team-driven activities, where knowledge-sharing and joint problem solving are the norm. Our state-of-the-art User Experience (UX) lab, Tech3Lab, will provide



you with the opportunity to engage in rigorous studies exploring innovative ideas.

For the PhD positions, we are looking for students holding at least a master's degree (or equivalent) in marketing, psychology, human-computer interaction, information systems, data science, neuroscience, or a related field. Desirable (but not required) qualifications include any among experimental research, quantitative and qualitative analysis, data analytics/visualization, data mining, machine learning, programming, web/graphic design skills, design/development of technology applications, and virtual reality / augmented reality. Experience with eye-tracking, brain-computer interfaces, and other neurophysiological methods is a plus.

HEC Montréal offers a competitive funding package consisting of:

- 30 000\$ per year
- Funding to participate in scientific activities
- Tuition fee waiver over a 4-year-period

We have one admission period yearly. The next application deadline is January 6, 2023 for the Fall 2023 admission, and details on the application process are available at <https://www.hec.ca/en/programs/phd/index.html> (or <https://bit.ly/hecmphd>).

HEC Montréal's PhD program is offered in partnership with McGill University and Concordia University, and one of the city's French-speaking universities, Université du Québec à Montréal (UQÀM). As a result, PhD courses are offered in both English and French, but you can complete all your courses and your dissertation in English, if you wish. We invite you to attend our webinar (https://hecmontreal.zoom.us/webinar/register/WN_h5wqE557S82IUQaI0-QV8Q or <https://bit.ly/phdwebinar22>) to learn more about the Tech3Lab and its associated departments.

For the Postdoctoral positions, we are looking for colleagues holding a PhD (or equivalent) in marketing, psychology, human-computer interaction, information systems, data sciences, psychology, neuroscience, or a related field. Desirable (but not required) qualifications include any among experimental research, quantitative and qualitative analysis, data analytics/visualization, data mining, machine learning, programming, web/graphic design skills, design/development of technology applications, and virtual reality / augmented reality. Experience with eye-tracking, brain-computer interfaces, and other neurophysiological methods is a plus.

The candidate is expected to publish at top venues in user experience and related fields (e.g., information systems, marketing, data science, neuroscience).

Compensation includes a competitive salary (commensurate with experience) with additional funds for travel and research support. The position begins immediately upon the availability of the candidate. The position will be for one year, while renewable for additional years with budget and performance allowing.

Please contact one of the Tech3lab co-directors directly (emails provided further below) to submit your candidacy, which should include:

- Cover letter describing the candidate's research interest and suitability for the position
- Curriculum vitae
- Contact information of two references

For all positions

To succeed in our environment, you will need to be fluent in French and/or English, be able to effectively present working results to an international community, possess strong communication and organization skills, and be able to perform both independently and within teams.

About Tech3Lab:

HEC Montréal's Tech3Lab is the largest research laboratory in the field of user experience (UX) in North America. Tech3Lab engages in collaborative research with important industry partners such as Deloitte, Videotron, Sobeys, Blue Yonder, Desjardins, and D-Box, as well as BNC and CAE. Funded by FRQSC, SSHRC and NSERC, researchers at Tech3Lab leverage methods and tools from disciplines such as neuroscience and artificial intelligence in order to further understand the role of emotion and cognition in the field of user experience (UX). Tech3Lab specializes in the UX with technology in contextual interactions between organizations and their customers and employees.

About HEC Montréal:

Canada's oldest business school and one of the first in North America, HEC Montréal has consistently been recognized as a premier institution, including in the recent rankings as a Top 100 Worldwide Business School Based on Research Contributions by the University of Texas-Dallas, as Tier I in the Global MBA Rankings by CEO Magazine, among others (<https://www.hec.ca/en/about/rankings/rankings.html>). The university is situated in the heart of Montréal, a very welcoming university city that ranks as the second-largest university city in North America, which offers a safe and vibrant community with affordable cost of living.

Questions regarding this opportunity may be sent with the email subject "PhD position announcement" or "Postdoc position announcement" to any of the four Tech3Lab Co-Directors:

Dr. Constantinos K. Coursaris (coursaris@hec.ca), Information Technologies
Dr. Pierre-Majorique Léger (pml@hec.ca), Information Technologies
Dr. Sylvain Sénécal (ss@hec.ca), Marketing
Dr. Marc Fredette (marc.fredette@hec.ca), Decision Sciences



Recent Publications in AIS Transactions on HCI (THCI)

THCI is ranked "A" in the 2019 Australian Business Deans Council (ABDC) Journal Quality List - <https://abdc.edu.au/research/abdc-journal-list/> with an acceptance rate of 7.61% (excluding special issues) in Year 2020.

The September 2021 Issue:

The September 2021 issue of THCI comprises a research commentary on a real-life HCI research journey from focusing on rigor to achieving practical significance and relevance, as well as three research papers on gamification and personalization. The research commentary entitled "Rigor, Relevance, and Practical Significance: A Real-life Journey to Organizational Value" by Joseph Valacich and Jeffrey Jenkins describes an exemplary showcase of a successful venture capital-backed corporation that they co-founded based on the Human Analytics™ technology that they developed and the bridging of rigor and relevance in creating organizational value.

The first research paper entitled "Should Gamification be Personalized? A Self-deterministic Approach" by Mario Passalacqua, Sylvain Sénécal, Marc Frédette, Lennart E. Nacke, Robert Pellerin, and Pierre-Majorique Léger utilized the self-determination theory and the goal-setting theory to study the effectiveness of personalized gamification. The second paper entitled "All Work and All Play? A Framework to Design Game-based Information Systems" by Connie Barber, Stacie Petter, and Diane Barber provides a game-based system design framework to help designers align game-based elements with organizational needs and user motivations. The third paper entitled "Understanding Personalization for Health Behavior Change Applications: A Review and Future Directions" by Atreyi Kankanhalli, Qihui Xia, Peilin Ai, and Xi Zhao reviewed the literature on personalization for health behavior change applications and developed an integrative framework to guide future research in this area.

You can download the papers from this issue at <https://aisel.aisnet.org/thci/vol13/iss2/> or the direct links provided below. You can also download papers in THCI by visiting the AIS E-Library (<http://aisel.aisnet.org/>) or the journal website at <http://aisel.aisnet.org/thci/>.

In this issue (Volume 13, Issue 3):

Paper 1 (Should Gamification be Personalized? A Self-deterministic Approach):

Passalacqua, M., Sénécal, S., Frédette, M., Nacke, L.E., Pellerin, Robert, & Léger, P.M. (2021). Should Gamification be Personalized? A Self-deterministic Approach. *AIS Transactions on Human-Computer Interaction*, 13(3), pp. 265-286. DOI: 10.17705/1thci.00150

Available at: <https://aisel.aisnet.org/thci/vol13/iss3/1/>

Abstract:

Information system (IS) gamification has been successful in many contexts. Yet, research has shown gamification's success to vary between individuals. In this paper, we compare personalized versus non-personalized gamification in a warehouse management setting. We devised a 26-participant within-subject experiment in which we programmed goal setting and feedback gamification elements into a wearable warehouse management system to evaluate the effectiveness of personalized gamification in terms of user performance. We examined the extent to which personalized gamification succeeded by categorizing participants into one of six user types through the HEXAD scale and then evaluating their performance time and errors across user types and conditions. We found that personalized gamification is more effective than non-personalized gamification. We present and discuss the motivational mechanisms through which personalized gamification can be more effective.

Paper 2 (All Work and All Play? A Framework to Design Game-based Information Systems):

Barber, C. S., Petter, S., & Barber, D. (2021). All Work and All Play? A Framework to Design Game-based Information Systems. *AIS Transactions on Human-Computer Interaction*, 13(3), pp. 287-315. DOI: 10.17705/1thci.00151

Available at: <https://aisel.aisnet.org/thci/vol13/iss3/2/>

Abstract:

Organizations have increasingly sought to develop and use game-based information systems to increase engagement among employees or customers. However, many game-based information systems have failed due to poor design. Game-based information systems' design must align with an organization's need or problem and users' motives. To help designers create game-based information systems that align with an organization's needs, we present the game-based system design framework (GSDF). Designers can use this framework to select game-based elements to support aesthetics, dynamics, and mechanics to encourage intrinsic or extrinsic motivation among users. We also create a game-based system design diagram (GSDD) and process in the spirit of UML diagrams for designers to communicate game-based information system designs. We explain how one can use the GSDF and GSDD and their value for practice and research.

Paper 3 (Understanding Personalization for Health Behavior Change Applications: A Review and Future Directions):

Kankanhalli, A., Xia, Q., Ai, P., & Zhao, X. (2021). Understanding Personalization for Health Behavior Change Applications: A Review and Future Directions. *AIS Transactions on Human-Computer Interaction*, 13(3), pp. 316-349. DOI: 10.17705/1thci.00152

Available at: <https://aisel.aisnet.org/thci/vol13/iss3/3/>

Abstract:

Health behavior change (HBC) applications hold much promise for promoting healthy lifestyles, such as enhancing physical activity (PA), diet, and sleep. Incorporating personalization strategies is seen as key to designing effective HBC applications. However, researchers and application designers lack knowledge about the different kinds of personalization strategies, how to implement them, and what strategies work. Thus, we reviewed prior empirical studies on personalization for HBC applications and developed a framework to synthesize the prior studies we identified and to provide an integrative view of the personalization strategies, their inputs, and outcomes. Our findings suggest that researchers have much potential to conduct design research that employs demographic and contextual characteristics for personalization and that examines personalization strategies that target HBC applications' interface and channels. In terms of implementation and adoption, we call for researchers to examine unaddressed issues such as low adherence and contextual barriers for these applications. We also suggest that researchers need to systematically examine the effects of specific personalization strategies on their efficacy. Other than providing an integrative view of extant studies, our study contributes by outlining key directions for future research in this area.

Paper 4 (Commentary): Rigor, Relevance, and Practical Significance: A Real-life Journey to Organizational Value

Valacich, J. S. & Jenkins, J. L. (2021). Rigor, relevance and practical significance: A real-life journey to organizational value. *AIS Transactions on Human-Computer Interaction*, 13(3), pp. 350-368. DOI: 10.17705/1thci.00153

Available at: <https://aisel.aisnet.org/thci/vol13/iss3/4/>

Abstract:

In this essay, we describe a research journey focusing on how to analyze mouse cursor movements, typing fidelity, and data from other human-computer interaction (HCI) devices to better understand the end-user online experience. We begin by defining organizational value and how it relates to other aspects that researchers use to assess academic research quality. We then describe and contrast our research journey by demonstrating key research milestones: from achieving statistical significance to achieving practical significance and, finally, to reaching relevance to practice. We then explain how we crossed the chasm between academic research and technology commercialization (i.e., the last research mile). We conclude by describing the process one can follow to develop an initial prototype—the minimal viable product (MVP)—and how demonstrations with potential customers provides continuous insight and validation for evolving the commercial product capabilities to meet constantly changing and evolving customer and industry needs.

The March 2022 Issue:

The March 2022 issue of THCI comprises four regular papers covering topics related to online decision support and training to increase persuasiveness and satisfaction of systems as well as task performance. As a heads-up, the next issue of THCI that is scheduled for publication in June 2022 is co-edited by Shuk Ying (Susanna) Ho and Dov Te'eni and it will showcase five special issue papers on the topic of fake news. Stay tuned!

The first research paper of this issue is entitled “Designing Caring and Informative Decision Aids to Increase Trust and Enhance the Interaction Atmosphere” and is co-authored by Sameh Al-Natour, Izak Benbasat, and Ron Cenfetelli. The authors adopted the perspective of viewing decision aids as social actors and tested their effects on trust and satisfaction. The second paper entitled “Interpersonal Model of Online Textual Persuasion” by E. Vance Wilson and Soussan Djamasbi proposed and tested a new online persuasion model for textual communication. The third paper entitled “Unraveling the Link between Simulation EHR Training and Task Performance: The Mediation Role of Stress” by Murad Moqbel, Vanessa G. Clark, Aroop Pal, and Lauren Pulino developed and assessed a research model on the role of stress in explaining the relationship between simulation-based EHR training and EHR-based task performance. The fourth and last paper entitled “The Persuasive Nature of Web Personalization on Online Users’ Product Perception: A Mental Accounting Perspective” by Mahesh Balan Umaithanu and Saji K. Mathew tested and explained the effect of web personalization on online users’ product perceptions using the mental accounting theory.

You can download the papers in this issue from <https://aisel.aisnet.org/thci/vol14/iss1/> or the direct links provided below. You can also download the papers published in THCI by visiting the AIS E-Library (<http://aisel.aisnet.org/>) or the journal website at <http://aisel.aisnet.org/thci/>.

In this issue (Volume 14, Issue 1):

Paper 1 (Designing Caring and Informative Decision Aids to Increase Trust and Enhance the Interaction Atmosphere):

Al-Natour, S., Benbasat, I., & Cenfetelli, R. (2022). Designing caring and informative decision aids to increase trust and enhance the interaction atmosphere. *AIS Transactions on Human-Computer Interaction*, 14(1), pp. 1-29. DOI: 10.17705/1thci.00159

Available at: <https://aisel.aisnet.org/thci/vol14/iss1/1/>

Abstract:

Decision aids have enjoyed extensive use in various domains. While decision aid research and practice have largely focused on making these aids more functional and utilitarian, we propose that one should also purposefully design them as effective interaction partners, especially when one deploys them in contexts that require a “human touch”, such as finance or healthcare. In this paper, we report on the results from an experiment we conducted on the effects of designing caring and informative decision aids on users’ evaluations of the aids and, subsequently, their satisfaction with the aids. Our results show that using explanations and expressive speech acts can enhance the extent to which users perceive decision aids as informative and caring. These strengthened beliefs subsequently enhance the extent to which users view decision aids as competent and as having integrity and improve the interaction atmosphere, which, in turn, increases users’ satisfaction with their overall interaction with the decision aid. We discuss the study’s contributions to theory and practice.



Paper 2 (Interpersonal Model of Online Textual Persuasion):

Wilson, E. V., & Djasasbi, S. (2022). Interpersonality model of online persuasion. *AIS Transactions on Human-Computer Interaction*, 14(1), pp. 30-59. DOI: 10.17705/1thci.00160

Available at: <https://aisel.aisnet.org/thci/vol14/iss1/2/>

Abstract:

As with other forms of human communication, text-based computer-mediated communication (CMC) media, such as email, instant messaging, and online texting, are often used as a means to persuade others. However, unlike most other media, which feature structural bias in their support for either interpersonal or broadcast communication modes, text-based CMC supports both modes. As a result, CMC text messages frequently have ambiguous origins. We argue that individuals respond to this ambiguity by categorizing these messages based on characteristics that distinguish interpersonal messages from broadcast messages, and receivers tend to comply to a greater extent with those messages that they perceive as interpersonal. Based on these arguments, we present a fundamentally new online textual persuasion model. In empirically testing the model in an online experiment that we assessed with structural equation modeling, we found that it exhibited strong explanatory power and additional utility in augmenting existing online persuasion models. The results offer important theoretical contributions to human-computer interaction research generally and provide practical specific insights for improving persuasive communication via text-based CMC.

Paper 3 (Unraveling the Link between Simulation EHR Training and Task Performance: The Mediation Role of Stress):

Moqbel, M., Clark, V. G., Pal, A., & Pulino, L. (2022). Unraveling the link between simulation EHR training and task performance: The mediation role of stress. *AIS Transactions on Human-Computer Interaction*, 14(1), pp. 60-77. DOI: 10.17705/1thci.00161

Available at: <https://aisel.aisnet.org/thci/vol14/iss1/3/>

Abstract:

Past research has explored the link between computer-mediated communication (CMC) and task performance, but it remains unclear how (i.e., under what mechanisms) CMC impacts task performance. Drawing on media naturalness theory and the stimulus-organism-response model as our theoretical framework, we develop a research model and describe how simulation-based EHR training (a type of CMC) can improve EHR-based task performance by mitigating stress. We empirically test the model with a unique experimental dataset from EHR lab assessment and questionnaires that 225 participants completed. The structural equation modeling analysis results show that simulation EHR training helped improve EHR-based task performance (both effectiveness and efficiency) by reducing perceived stress. We discuss theoretical and practical implications, limitations, and future research.

Paper 4 (The Persuasive Nature of Web Personalization on Online Users' Product Perception: A Mental Accounting Perspective):

Balan, U. M., & Mathew, S. K. (2022). The persuasive nature of web personalization on online users' product perception: A mental accounting perspective. *AIS Transactions on Human-Computer Interaction*, 14(1), pp. 78-106. DOI: 10.17705/1thci.00162

Available at: <https://aisel.aisnet.org/thci/vol14/iss1/4/>

Abstract:

E-commerce firms strive to enhance engagement by providing augmented experiences to online users. This research focuses on one such shopping experience enhancement technique—Web personalization. In this study, we examine how personalization affects online users' perceptions and how different personalization levels differentially impact those perceptions. Drawing on mental accounting theory, we argue that personalization, by providing convenience in online buying, increases transaction utility and, thus, influences online users' product perceptions. We conducted a laboratory experiment in a public university in Southern India where users took buying decisions at four different personalization levels: zero, low, medium, and high. The findings from this study suggest that product prices affect users' perceived product quality, which, in turn, affects their perceived product values and, subsequently, their final purchase decision. Web personalization plays a moderating role in all cause-effect relations above. This study contributes to the existing literature on the Web personalization strategy and online user behavior. We find empirical evidence to show that personalization plays a moderating role in the relationship between user perception and intention to purchase.

The June 2022 Issue:

The June 2022 issue of THCI is a special issue comprising five research articles on fake news and deception. This issue is co-edited by Dov Te'eni from Tel-Aviv University and Shuk Ying (Susanna) Ho from the Australian National University.

The first research paper of this issue is entitled “Health Misinformation on Social Media: A Systematic Literature Review and Future Research Directions” by Yang-Jun Li, Jens Joachim Marga, Christy M.K. Cheung, Xiao-Liang Shen, and Matthew K.O. Lee. They developed an integrative stage-based framework of health misinformation on social media and provided directions for future research. The second paper entitled “Rumor Correction in Social Media Crisis Communication: A Case of Connective Sense-breaking” by Milad Mirbabaie, Julian Marx, and Annette Reimann examined how sense-breaking (i.e., rumor-supporting and correction messages) impact rumor spreading and how different user archetypes contribute to the process. The third paper entitled “Health-related Misinformation Harm during the COVID-19 Pandemic: An Investigation of Non-comparative and Comparative Harm Perceptions” by Thi Tran, Rohit Valecha, and Raghav Rao assessed how non-comparative harms and comparative harms shape harm perceptions and how harm perceptions vary based on COVID-19 victimization experience. The fourth paper entitled “Understanding the Message and Formulation of Fake Online Reviews: A Language-production Model Perspective” by Boran Wang and Kevin Kuan analyzed psycholinguistic characteristics that differentiate fake and genuine online reviews. The fifth and last paper of this special issue is entitled “The Reasoning behind Fake News Assessments: A Linguistic Analysis” by Lydia Manikonda, Dorit Nevo, Benjamin Horne, Clare Arrington, and Sibel Adali. They utilized a psycholinguistic approach to analyze justifications that news readers provided about believing and not believing news articles and found

both cognitive and motivated reasoning as well as agreements with the ground truth to impact the assessments.

You can download the papers in this issue from <https://aisel.aisnet.org/thci/vol14/iss2/> or the direct links provided below. You can also download the papers published in THCI by visiting the AIS E-Library (<http://aisel.aisnet.org/>) or the journal website at <http://aisel.aisnet.org/thci/>.

In this issue (Volume 14, Issue 2):

Paper 1 (HCI that Makes and Breaks Online Fake: An Introduction to the Special Issue):

Te'eni, D., & Ho, S. Y. (2022). HCI that makes and breaks fake online: An introduction to the special issue. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 107-115. DOI: 10.17705/1thci.00163

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/1/>

Abstract:

In this editorial, we introduce the special issue on online fake in human-computer interaction. The special issue comprises five papers, including one literature review paper. We propose a conceptual framework that specifies the processes involved in generating, as well as circumventing, online fake and highlights significant aspects of future HCI-related issues to prevent, detect, and correct online fake. In particular, based on the five papers, we note the importance of HCI research in delegating the prevention, detection, and correction of online fake to artificial intelligence.

Paper 2 (Health Misinformation on Social Media: A Systematic Literature Review and Future Research Directions):

Li, Y. J., Marga, J. J., Cheung, C. M. K., Shen, X. L., & Lee, M. K. O. (2022). Health misinformation on social media: A systematic literature review and future research directions. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 116-149. DOI: 10.17705/1thci.00164

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/2/>

Abstract:

Health misinformation on social media is an emerging public concern as the COVID-19 infodemic tragically evidences. Key challenges that empower health misinformation's spread include rapidly advancing social technologies and high social media usage penetration. However, research on health misinformation on social media lacks cohesion and has received limited attention from information systems (IS) researchers. Given this issue's importance and relevance to the IS discipline, we summarize the current state of research on this emerging topic and identify research gaps together with meaningful research questions. Following a two-step literature search, we identify and analyze 101 papers. Drawing on the Shannon-Weaver communication model, we propose an integrative stage-based framework of health misinformation on social media. Based on literature analysis, we identify research opportunities and prescribe directions for future research on health misinformation on social media.

Paper 3 (Rumor Correction in Social Media Crisis Communication: A Case of Connective Sense-breaking):

Mirbabaie, M., Marx, J., & Reimann, A. (2022). Rumor correction in social media crisis communication: A case of connective sense-breaking. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 150-184. DOI: 10.17705/1thci.00165

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/3/>

Abstract:

Large-scale societal crises require individuals and organizations to make sense of ambiguous situations. Nowadays, users use social media such as Twitter to seek and contribute crisis-related information. However, contradictory cues such as rumors increasingly break up their sense- and decision-making processes. We examine how sense-breaking (i.e., rumor-supporting and -correction messages) impact rumor spreading and how different user archetypes contribute to this process. Against the theory of connective action as a backdrop, we conducted a case study on the German Chemnitz 2018 riots and associated Twitter communication. With an analysis combining semi-automated content analysis and social network analysis, we identified five rumor-spreading networks. Characteristic user behavior and deduced user archetypes revealed that impeded connective action negatively impacted rumor correction. From those findings, we theoretically derive a concept that we call "connective sense-breaking"; that is, connective efforts by involved user archetypes and their supporting and correction behavior to achieve information consensus. This new perspective on rumor spreading provides IS researchers with an expedient lens for future work and helps crisis communication stakeholders such as emergency management agencies to define their role in rumor spreading and, consequently, improve their ad hoc decision-making.

Paper 4 (Health-related Misinformation Harm during the COVID-19 Pandemic: An Investigation of Non-comparative and Comparative Harm Perceptions):

Tran, T., Valecha, R., & Rao, H. R. (2022). Health-related misinformation harm during the COVID-19 pandemic: An investigation of non-comparative and comparative harm perceptions. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 185-206. DOI: 10.17705/1thci.00166

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/4/>

Abstract:

Misinformation about the coronavirus disease of 2019 (COVID-19) health crisis has been widespread on social media and caused various types of harms in society. While some researchers have investigated the way in which people perceive misinformation harm in crises, little research has systematically examined harms from health-related misinformation. In order to address this gap, we focus on non-comparative and comparative harm perceptions of the affected community in the COVID-19 pandemic context. We examine non-comparative harms

(which component harms and contextual harms reflect) and comparative harms (which counter-contextual harms reflect) in order to understand harm perceptions. We also investigate how harm perception varies based on COVID-19 victimization experience. We used a professional survey company named Cint to collect data using a scenario-based survey with 343 participants. We extract various findings such as how contextual features shape perceived harms and reveal the scenarios in which COVID-19 victims perceive higher contextual harms but lower counter-contextual harms. We also examine how corrective actions of social media shape harm perceptions.

Paper 5 (Understanding the Message and Formulation of Fake Online Reviews: A Language-production Model Perspective):

Wang, B., & Kuan, K. K. Y. (2022). Understanding the message and formulation of fake online reviews: A language-production model perspective. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 207-229. DOI: 10.17705/1thci.00167

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/5/>

Abstract:

Consumers have become ever more reliant on online reviews. Therefore, fake reviews have also become increasingly rampant and eroded online review platforms' credibility. Previous literature suggests that particular linguistic styles can manifest in fake reviews with reference to the varying stages of the language-production process. Drawing on the language-production model as our theoretical foundation, we examine the psycholinguistic styles of fake online reviews at the message and formulation level. We performed a computational linguistic analysis on 66,940 reviews from Yelp. Our results suggest that fake reviews align more with deceptive writing in terms of the message-level variables such as length and psychological (affective, cognitive, social, and perceptual) cues. Interestingly, we found that they align less with deceptive writing in terms of the formulation-level variables such as readability, pronouns, and part-of-speech tags, which may be due to the fake review writers' conscious attempt to follow the language styles that genuine reviews adopt.

Paper 6 (The Reasoning behind Fake News Assessments: A Linguistic Analysis):

Manikonda, L., Nevo, D., Horne, B. D., Arrington, C., & Adali, S. (2022). The reasoning behind fake news assessments: A linguistic analysis. *AIS Transactions on Human-Computer Interaction*, 14(2), pp. 230-253. DOI: 10.17705/1thci.00168

Available at: <https://aisel.aisnet.org/thci/vol14/iss2/6/>

Abstract:

This paper investigates how individuals reason about the authenticity of the news content they consume. While researchers have conducted much work on fake news detection and prevention, we know relatively less about how news readers reason about the content that they read. Using data collected through Amazon Mechanical Turk, we analyzed over 1,000 justifications that news readers provided about why they believe (or fail to believe) given news articles. We included both fake and credible articles in our analyses and examined the novelty of the news topic as a possible contingency factor that differentiated the reasoning provided. Based on our psycholinguistic analyses, we found that news readers employ both cognitive and motivated reasoning and that agreement with the ground truth impacts the reasoning more than a news topic's novelty. Our insights contribute to the literature on news consumption and reasoning in the context of evaluating fake news. Furthermore, this knowledge contribution has implications in areas such as news veracity intervention and tool design. Lastly, we offer a methodological contribution via using linguistic analysis in a novel way to assess the quality of open-ended survey questions.

The September 2022 Issue:

The September 2022 issue of THCI comprises five research articles and one research commentary.

The first paper of this issue is entitled "Screen Time and Productivity: An Extension of Goal-setting Theory to Explain Optimum Smartphone Use" by Kaveh Abhari and Isaac Vaghefi. The authors studied key antecedents and outcomes of smartphone screen-time self-monitoring success.

The second paper is entitled "Deriving Value from Big Data Analytics in Healthcare: A Value-focused Thinking Approach" by Brenda Eschenbrenner and Rachel Brenden. The authors utilized the value-focused thinking approach to identify actionable objectives to help healthcare organizations derive the maximum value from big data analytics.

The third paper entitled "Digital Human Representations for Health Behavior Change: A Structured Literature Review" by Marc T. P. Adam, Stephan Dreyer, Henner Gimpel, and Christian Olenberger covers how social cues of digital human representations (e.g., avatars and embodied agents) can influence health behavior change based on a literature review of 60 papers.

The fourth paper entitled "The Feedback Loop of Flow: Controlled Experiment Shows Task-relevant Feedback Increases Flow" by Owen Schaffer and Xiaowen Fang shows that task-relevant feedback increases flow experience. The authors also provide design guidelines that facilitate users getting into the flow state.

The fifth paper is entitled "A Study of Interaction, Visual Canvas, and Immersion in AR Design: A DSR Approach" where the authors, Ramnath Krishnan Pallasena, Mayank Sharma, and Venkataraghavan Krishnaswamy, applied design science research guidelines to design, develop, and evaluate an augmented reality (AR) artifact. Their study suggests that interaction, visual cues, and immersion facilitate AR-mediated communication, whereas high-quality product visuals and interactive user controls contribute to a good AR experience.

The sixth paper, which is a commentary entitled "Intelligence Augmentation: Human Factors in AI and Future of Work", is co-authored by Souren Paul, Lingyao (Ivy) Yuan, Hemant Jain, Lionel P. Robert Jr., Jim Spohrer, and Hila Lifshitz-Assaf. They highlight important socio-technical aspects and ethical considerations of augmented intelligence, and explain how augmented intelligence can play a key role in shaping the future of work.

You can download the papers in this issue from <https://aisel.aisnet.org/thci/vol14/iss3/> or the direct links provided below. You can also download the papers published in THCI by visiting the AIS E-Library (<http://aisel.aisnet.org/>) or the journal website at <http://aisel.aisnet.org/thci/>.

In this issue (Volume 14, Issue 2):

Paper 1 (Screen Time and Productivity: An Extension of Goal-setting Theory to Explain Optimum Smartphone Use):

Abhari, K., & Vaghefi, I. (2022). Screen time and productivity: An extension of goal-setting theory to explain optimum smartphone use. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 254-288. DOI: 10.17705/1thci.00169

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/1/>

Abstract:

Over the past several years, much research has examined the negative consequences that can arise from smartphone use. To help reduce these consequences, companies have developed smartphone applications and features to enable self-monitoring behaviors. However, the mechanisms that have caused smartphone-enabled self-monitoring behaviors to emerge and the positive outcomes that might result from such behaviors have received limited scholarly attention. In this study, we ameliorate this gap by proposing a framework that highlights key antecedents and outcomes of screen-time self-monitoring success based on a smartphone-based self-monitoring intervention. Informed by a short-term longitudinal study, our results show how smartphone-based self-monitoring can enhance awareness of smartphone use and, consequently, lead to positive outcomes for users. Our findings reveal that how users perceive smartphone self-monitoring affordances, their outcome expectations, and their smartphone self-monitoring efficacy positively relate to the extent they engage in smartphone-based self-monitoring behavior. In turn, self-monitoring enhances user productivity and leads to an overall sense of contentment with achievement. Nevertheless, our findings suggest that self-monitoring fatigue negatively moderates these relationships. This study offers novel theoretical and practical insights to encourage users to use smartphones in a more regulated manner. More generally, this study contributes to the literature on self-monitoring and self-regulation in digitally enabled environments.

Paper 2 (Deriving Value from Big Data Analytics in Healthcare: A Value-focused Thinking Approach):

Eschenbrenner, B. & Brenden, R. (2022). Deriving value from big data analytics in healthcare: A value-focused thinking approach. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 289-313. DOI: 10.17705/1thci.00170

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/2/>

Abstract:

With the potential to generate more insights from data than ever before, big data analytics has become highly valuable to many industries, especially healthcare. Big data analytics can make important contributions to many areas, such as enhancements in the quality of patient care and improvements in operational efficiencies. Big data analytics provides opportunities to address concerns such as disease diagnoses and prevention. However, it has posed challenges such as data security and privacy issues. Also, healthcare institutions have concerns about deriving the greatest benefit from their big data analytics endeavors. Therefore, identifying actionable objectives that can help healthcare organizations derive the maximum value from big data analytics is needed. Using the value-focused thinking approach, we interviewed individuals associated with data analytics in healthcare to identify actionable objectives that one needs to consider to derive value from big data analytics, which practitioners can use for their own endeavors and provide opportunities for future research.

Paper 3 (Digital Human Representations for Health Behavior Change: A Structured Literature Review):

Adam, M. T. P., Dreyer, S., Gimpel, H., & Olenberger, C. (2022). Digital human representations for health behavior change: A structured literature review. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 314-355. DOI: 10.17705/1thci.00171

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/3/>

Abstract:

Organizations have increasingly begun using digital human representations (DHRs), such as avatars and embodied agents, to deliver health behavior change interventions (BCIs) that target modifiable risk factors in the smoking, nutrition, alcohol overconsumption, and physical inactivity domain. We conducted a structured literature review of 60 papers from the computing, health, and psychology literatures to investigate how DHRs' social design affects whether BCIs succeed. Specifically, we analyzed how differences in social cues that DHRs use affect user psychology and how this can support or hinder different intervention functions. Building on established frameworks from the human-computer interaction and BCI literatures, we structure extant knowledge that can guide efforts to design future DHR-delivered BCIs. We conclude that more field studies are needed to better understand the temporal dynamics and the mid-term and long-term effects of DHR social design on user perception and intervention outcomes.

Paper 4 (The Feedback Loop of Flow: Controlled Experiment Shows Task-relevant Feedback Increases Flow):

Schaffer, O. & Fang, X. (2022). The feedback loop of flow: Controlled experiment shows task-relevant feedback increases flow. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 356-389. DOI: 10.17705/1thci.00172

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/4/>

Abstract:

Flow theory suggests three flow conditions lead to flow: optimal challenges, clear goals, and immediate feedback. Previous research has only confirmed the link between optimal challenges and flow with controlled experiments. Inspired by Miller's test-operate-test-exit (TOTE) units and Csikszentmihalyi's flow theory, we introduce a feedback loop of flow model of the cognitive processes that lead to flow in computer-based tasks. This model illustrates how the flow conditions come together to create the flow experience. In particular, the feedback loop of flow model we present suggests the feedback must be task-relevant to generate a flow state, which means there must be feedback that pertains to the goals of the task. We conducted a controlled experiment to test the causal relationship between task-relevant feedback and flow. Participants who experienced designs with task-relevant feedback rated their experience higher on a measure of flow than those in either the no feedback or randomized feedback control groups. Our findings provide evidence that feedback increases flow and specifically that designs with task-relevant feedback increase flow. We present a design for flow model and discuss design guidelines

for how to create interactive systems that will facilitate users getting into a flow state. Task-relevant feedback communicates how well users are performing actions that make progress towards the goal of the optimally challenging task that is getting them into flow and how they can get better at that task. As with TOTE units, the feedback loop of flow is a recursive process, which suggests task-relevant feedback must be presented continuously and for each subtask of the overall task.

Paper 5 (A Study of Interaction, Visual Canvas, and Immersion in AR Design: A DSR Approach):

Pallasena, R. K., Sharma, M., & Krishnaswamy, V. (2022). A study of interaction, visual canvas, and immersion in AR design — A DSR approach. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 390-425. DOI: 10.17705/1thci.00173

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/5/>

Abstract:

Augmented reality (AR) as an innovative technology has changed the way people use technology for interaction and communication. While researchers have studied the application of AR, research on AR as a communication medium remains scant. In this study, we investigate the effect of AR factors (namely, interaction, visual canvas/cues, and immersion) on AR-mediated communication. We apply design science research (DSR) guidelines to design, develop, and evaluate an AR artifact. We derive the design elements based on interactivity, media naturalness, and immersion theories and develop the AR artifact as a mobile app in an iterative manner. We evaluate the design product through the informed arguments and scenarios method, and the design process by assessing its conformance to DSR principles. We show that AR factors' design elements—interaction (user controls, contextual tasks, and ergonomics), visual canvas/cues (realistic 3D models, visual and audio cues, and aesthetics), and immersion (diverse components)—play a critical role in AR-mediated communication. Furthermore, high-quality product visuals and interactive user controls give users a good AR experience. From a practice perspective, AR app designers may incorporate the design process we used in our study and generate AR experiences that fully exploit AR media's communication affordance. We contribute to knowledge by using DSR guidelines for designing and developing AR as a communication medium.

Paper 6 (Intelligence Augmentation: Human Factors in AI and Future of Work):

Paul, S., Yuan, L., Jain, H., Robert, L. P., Spohrer, J., & Lifshitz-Assaf, H. (2022). Intelligence augmentation: Human factors in AI and future of work. *AIS Transactions on Human-Computer Interaction*, 14(3), pp. 426-445. DOI: 10.17705/1thci.00174

Available at: <https://aisel.aisnet.org/thci/vol14/iss3/6/>

Abstract:

The availability of parallel and distributed processing at a reasonable cost and the diversity of data sources have contributed to advanced developments in artificial intelligence (AI). These developments in the AI computing environment are not concomitant with changes in the social, legal, and political environment. While considering deploying AI, the deployment context and the end goal of human intelligence augmentation for that specific context have surfaced as significant factors for professionals, organizations, and society. In this research commentary, we highlight some important socio-technical aspects associated with recent growth in AI systems. We elaborate on the intricacies of human-machine interaction that form the foundation of augmented intelligence. We also highlight the ethical considerations that relate to these interactions and explain how augmented intelligence can play a key role in shaping the future of human work.

Call for Papers: AIS Transactions on Human-Computer Interaction

THCI is one of the journals in the AIS (Association for Information Systems) e-library at <http://aisel.aisnet.org/thci>. THCI is a high-quality peer-reviewed international scholarly journal on Human-Computer Interaction. As an AIS journal, THCI is oriented to the Information Systems community, emphasizing HCI/UX applications in business, managerial, organizational, and cultural contexts. However, it is open to all related communities that share intellectual interests in HCI phenomena and issues. The editorial objective is to enhance and communicate knowledge about the interplay among humans, information, technologies, and tasks in order to guide the development and use of human-centered Information and Communication Technologies (ICT) and services for individuals, groups, organizations, and communities. To increase awareness and readership, THCI is still freely available to the public, which is beneficial to the authors and the community. You can find information related to all aspects of THCI at its website (<http://aisel.aisnet.org/thci>), including how to submit manuscripts for publication consideration. We would like to thank the AIS Council (<http://www.aisnet.org/>) for its continued support of the journal. And, as always, we are happy to announce that we have published the journal on time for every issue and are building a strong case for a solid impact factor when released by SSCI and Scopus in the near future. The quality of THCI is affirmed by its inclusion as an "A" journal in the Australian Business Deans Council (ABDC) journal quality list.

Topics of interest to THCI include but are not limited to the following:

- Behavioral, cognitive, motivational, and affective aspects of human and technology interaction
- User task analysis and modeling; fit between representations and task types
- Digital documents/genres; human information seeking and web navigation behaviors; human information interaction; information visualization
- Social media; social computing; virtual communities
- Behavioral information security and information assurance; privacy and trust in human technology interaction
- User interface design and evaluation for various applications in business, managerial, organizational, educational, social, cultural, non-work, and other domains
- Integrated and/or innovative approaches, guidelines, and standards or metrics for human centered analysis, design, construction,



evaluation, and use of interactive devices and information systems

- Information systems usability engineering; universal usability
- Impact of interfaces/information technology on people's attitude, behavior, performance, perception, and productivity
- Implications and consequences of technological change on individuals, groups, society, and socio-technical units
- Software learning and training issues such as perceptual, cognitive, and motivational aspects of learning
- Gender and information technology
- The elderly, the young, and special needs populations for new applications, modalities, and multimedia interaction
- Issues in HCI education

The language for the journal is English. The audience includes international scholars and practitioners who conduct research on issues related to the objectives of the journal. The publication frequency is quarterly: 4 issues per year to be published in March, June, September, and December. The AIS Special Interest Group on Human-Computer Interaction (SIGHCI, <http://sighci.org/>) is the official sponsor of THCI.

Call for Items: AIS SIGHCI Newsletter Volume 21, Issue 2

You are invited to offer items to the coming issue of AIS SIGHCI newsletter (Volume 21, Issue 2), to be published in March 2023. All items will be editorial reviewed. If you are interested, please send your pieces to the newsletter editor Prateek Jain (pjain@wpi.edu) by February 15, 2023. Possible topics include, but are not limited to, the following:

1. Short essay/opinion/research study (800 – 1700 words)
2. HCI book review (800 – 1700 words). Please feel free to contact the editor beforehand if you intend to review a book or if you wish your own book to be reviewed.
3. Teaching HCI (up to 1700 words): teaching ideas or cases, sample syllabus, etc.
4. Industry voice (800 – 1700 words). We welcome HCI related essays from industry professionals.
5. Brief introduction of HCI research tools (up to 300 words).
6. Brief introduction of interesting HCI journals and/or special issues, including citation information, brief description, table of content (for special issues), etc.
7. CFP for HCI related journals or conferences.
8. News about SIGHCI members (up to 300 words for each item): honors and awards, professional activities, new appointments, interesting projects, new books or publications, etc.
9. Any other announcements (up to 300 words for each item).

To view previous newsletter issues, please visit <https://sighci.org/newsletters/>

Save the Dates

SIGHCI-Sponsored Activities & Events		
Pre-ICIS Workshop 2022	Copenhagen, Denmark (Hybrid Format)	December 11, 2022
ICIS 2022	Copenhagen, Denmark	December 9-14, 2022
HICSS 2023	Maui, Hawaii	January 3–6, 2023
ECIS 2023	Kristiansand, Norway	June 11-16, 2023
SIGHCI website: http://sighci.org/		



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