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HCI for Cybersecurity, Privacy and Trust

Second International Conference, HCI-CPT 2020

Held as Part of the 22nd HCI International Conference, HCII 2020

Copenhagen, Denmark, July 19–24, 2020

Proceedings

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Foreword

The 22nd International Conference on Human-Computer Interaction, HCI International 2020 (HCII 2020), was planned to be held at the AC Bella Sky Hotel and Bella Center, Copenhagen, Denmark, during July 19–24, 2020. Due to the COVID-19 coronavirus pandemic and the resolution of the Danish government not to allow events larger than 500 people to be hosted until September 1, 2020, HCII 2020 had to be held virtually. It incorporated the 21 thematic areas and affiliated conferences listed on the following page.

A total of 6,326 individuals from academia, research institutes, industry, and governmental agencies from 97 countries submitted contributions, and 1,439 papers and 238 posters were included in the conference proceedings. These contributions address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The contributions thoroughly cover the entire field of human-computer interaction, addressing major advances in knowledge and effective use of computers in a variety of application areas. The volumes constituting the full set of the conference proceedings are listed in the following pages.

The HCI International (HCII) conference also offers the option of “late-breaking work” which applies both for papers and posters and the corresponding volume(s) of the proceedings will be published just after the conference. Full papers will be included in the “HCII 2020 - Late Breaking Papers” volume of the proceedings to be published in the Springer LNCS series, while poster extended abstracts will be included as short papers in the “HCII 2020 - Late Breaking Posters” volume to be published in the Springer CCIS series.

I would like to thank the program board chairs and the members of the program boards of all thematic areas and affiliated conferences for their contribution to the highest scientific quality and the overall success of the HCI International 2020 conference.

This conference would not have been possible without the continuous and unwavering support and advice of the founder, Conference General Chair Emeritus and Conference Scientific Advisor Prof. Gavriel Salvendy. For his outstanding efforts, I would like to express my appreciation to the communications chair and editor of HCI International News, Dr. Abbas Moallem.

July 2020

Constantine Stephanidis

HCI International 2020 Thematic Areas and Affiliated Conferences

Thematic areas:

- HCI 2020: Human-Computer Interaction
- HIMI 2020: Human Interface and the Management of Information

Affiliated conferences:

- EPCE: 17th International Conference on Engineering Psychology and Cognitive Ergonomics
- UAHCI: 14th International Conference on Universal Access in Human-Computer Interaction
- VAMR: 12th International Conference on Virtual, Augmented and Mixed Reality
- CCD: 12th International Conference on Cross-Cultural Design
- SCSM: 12th International Conference on Social Computing and Social Media
- AC: 14th International Conference on Augmented Cognition
- DHM: 11th International Conference on Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management
- DUXU: 9th International Conference on Design, User Experience and Usability
- DAPI: 8th International Conference on Distributed, Ambient and Pervasive Interactions
- HCIBGO: 7th International Conference on HCI in Business, Government and Organizations
- LCT: 7th International Conference on Learning and Collaboration Technologies
- ITAP: 6th International Conference on Human Aspects of IT for the Aged Population
- HCI-CPT: Second International Conference on HCI for Cybersecurity, Privacy and Trust
- HCI-Games: Second International Conference on HCI in Games
- MobiTAS: Second International Conference on HCI in Mobility, Transport and Automotive Systems
- AIS: Second International Conference on Adaptive Instructional Systems
- C&C: 8th International Conference on Culture and Computing
- MOBILE: First International Conference on Design, Operation and Evaluation of Mobile Communications
- AI-HCI: First International Conference on Artificial Intelligence in HCI

Conference Proceedings Volumes Full List

1. LNCS 12181, Human-Computer Interaction: Design and User Experience (Part I), edited by Masaaki Kurosu
2. LNCS 12182, Human-Computer Interaction: Multimodal and Natural Interaction (Part II), edited by Masaaki Kurosu
3. LNCS 12183, Human-Computer Interaction: Human Values and Quality of Life (Part III), edited by Masaaki Kurosu
4. LNCS 12184, Human Interface and the Management of Information: Designing Information (Part I), edited by Sakae Yamamoto and Hirohiko Mori
5. LNCS 12185, Human Interface and the Management of Information: Interacting with Information (Part II), edited by Sakae Yamamoto and Hirohiko Mori
6. LNAI 12186, Engineering Psychology and Cognitive Ergonomics: Mental Workload, Human Physiology, and Human Energy (Part I), edited by Don Harris and Wen-Chin Li
7. LNAI 12187, Engineering Psychology and Cognitive Ergonomics: Cognition and Design (Part II), edited by Don Harris and Wen-Chin Li
8. LNCS 12188, Universal Access in Human-Computer Interaction: Design Approaches and Supporting Technologies (Part I), edited by Margherita Antona and Constantine Stephanidis
9. LNCS 12189, Universal Access in Human-Computer Interaction: Applications and Practice (Part II), edited by Margherita Antona and Constantine Stephanidis
10. LNCS 12190, Virtual, Augmented and Mixed Reality: Design and Interaction (Part I), edited by Jessie Y. C. Chen and Gino Fragomeni
11. LNCS 12191, Virtual, Augmented and Mixed Reality: Industrial and Everyday Life Applications (Part II), edited by Jessie Y. C. Chen and Gino Fragomeni
12. LNCS 12192, Cross-Cultural Design: User Experience of Products, Services, and Intelligent Environments (Part I), edited by P. L. Patrick Rau
13. LNCS 12193, Cross-Cultural Design: Applications in Health, Learning, Communication, and Creativity (Part II), edited by P. L. Patrick Rau
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15. LNCS 12195, Social Computing and Social Media: Participation, User Experience, Consumer Experience, and Applications of Social Computing (Part II), edited by Gabriele Meiselwitz
16. LNAI 12196, Augmented Cognition: Theoretical and Technological Approaches (Part I), edited by Dylan D. Schmorrow and Cali M. Fidopiastis
17. LNAI 12197, Augmented Cognition: Human Cognition and Behaviour (Part II), edited by Dylan D. Schmorrow and Cali M. Fidopiastis

18. LNCS 12198, Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management: Posture, Motion and Health (Part I), edited by Vincent G. Duffy
19. LNCS 12199, Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management: Human Communication, Organization and Work (Part II), edited by Vincent G. Duffy
20. LNCS 12200, Design, User Experience, and Usability: Interaction Design (Part I), edited by Aaron Marcus and Elizabeth Rosenzweig
21. LNCS 12201, Design, User Experience, and Usability: Design for Contemporary Interactive Environments (Part II), edited by Aaron Marcus and Elizabeth Rosenzweig
22. LNCS 12202, Design, User Experience, and Usability: Case Studies in Public and Personal Interactive Systems (Part III), edited by Aaron Marcus and Elizabeth Rosenzweig
23. LNCS 12203, Distributed, Ambient and Pervasive Interactions, edited by Norbert Streitz and Shin'ichi Konomi
24. LNCS 12204, HCI in Business, Government and Organizations, edited by Fiona Fui-Hoon Nah and Keng Siau
25. LNCS 12205, Learning and Collaboration Technologies: Designing, Developing and Deploying Learning Experiences (Part I), edited by Panayiotis Zaphiris and Andri Ioannou
26. LNCS 12206, Learning and Collaboration Technologies: Human and Technology Ecosystems (Part II), edited by Panayiotis Zaphiris and Andri Ioannou
27. LNCS 12207, Human Aspects of IT for the Aged Population: Technologies, Design and User Experience (Part I), edited by Qin Gao and Jia Zhou
28. LNCS 12208, Human Aspects of IT for the Aged Population: Healthy and Active Aging (Part II), edited by Qin Gao and Jia Zhou
29. LNCS 12209, Human Aspects of IT for the Aged Population: Technology and Society (Part III), edited by Qin Gao and Jia Zhou
30. LNCS 12210, HCI for Cybersecurity, Privacy and Trust, edited by Abbas Moallem
31. LNCS 12211, HCI in Games, edited by Xiaowen Fang
32. LNCS 12212, HCI in Mobility, Transport and Automotive Systems: Automated Driving and In-Vehicle Experience Design (Part I), edited by Heidi Krömker
33. LNCS 12213, HCI in Mobility, Transport and Automotive Systems: Driving Behavior, Urban and Smart Mobility (Part II), edited by Heidi Krömker
34. LNCS 12214, Adaptive Instructional Systems, edited by Robert A. Sottilare and Jessica Schwarz
35. LNCS 12215, Culture and Computing, edited by Matthias Rauterberg
36. LNCS 12216, Design, Operation and Evaluation of Mobile Communications, edited by Gavriel Salvendy and June Wei
37. LNCS 12217, Artificial Intelligence in HCI, edited by Helmut Degen and Lauren Reinerman-Jones

38. CCIS 1224, HCI International 2020 Posters - Part I, edited by Constantine Stephanidis and Margherita Antona
39. CCIS 1225, HCI International 2020 Posters - Part II, edited by Constantine Stephanidis and Margherita Antona
40. CCIS 1226, HCI International 2020 Posters - Part III, edited by Constantine Stephanidis and Margherita Antona

<http://2020.hci.international/proceedings>



Second International Conference on HCI for Cybersecurity, Privacy and Trust (HCI-CPT 2020)

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The full list with the Program Board Chairs and the members of the Program Boards of all thematic areas and affiliated conferences is available online at:

<http://www.hci.international/board-members-2020.php>



HCI International 2021

The 23rd International Conference on Human-Computer Interaction, HCI International 2021 (HCII 2021), will be held jointly with the affiliated conferences in Washington DC, USA, at the Washington Hilton Hotel, July 24–29, 2021. It will cover a broad spectrum of themes related to Human-Computer Interaction (HCI), including theoretical issues, methods, tools, processes, and case studies in HCI design, as well as novel interaction techniques, interfaces, and applications. The proceedings will be published by Springer. More information will be available on the conference website: <http://2021.hci.international/>.

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Contents

Human Factors in Cybersecurity

Awareness and Working Knowledge of Secure Design Principles: A User Study	3
<i>May Almousa, Mahsa Keshavarz, and Mohd Anwar</i>	
The Impact of Gamification Factor in the Acceptance of Cybersecurity Awareness Augmented Reality Game (CybAR).	16
<i>Hamed Alqahtani, Manolya Kavakli-Thorne, and Majed Alrowaily</i>	
Does Decision-Making Style Predict Individuals' Cybersecurity Avoidance Behaviour?.	32
<i>Hamed Alqahtani and Manolya Kavakli-Thorne</i>	
Examining Human Individual Differences in Cyber Security and Possible Implications for Human-Machine Interface Design	51
<i>Laura M. Bishop, Phillip L. Morgan, Phoebe M. Asquith, George Raywood-Burke, Adam Wedgbury, and Kevin Jones</i>	
Building Connections for a Secure User Experience	67
<i>David Blank and Ravi Kanth Kosuru</i>	
Human Cyber Risk Management by Security Awareness Professionals: Carrots or Sticks to Drive Behaviour Change?	76
<i>John M. Blythe, Alan Gray, and Emily Collins</i>	
Analyzing Cybersecurity Understanding Using a Brain Computer Interface . . .	92
<i>Kingberli Capellan, Manuel Condado, Isabel Morais, and Patricia Morreale</i>	
Cyber-Risk in Healthcare: Exploring Facilitators and Barriers to Secure Behaviour	105
<i>Lynne Coventry, Dawn Branley-Bell, Elizabeth Sillence, Sabina Magalini, Pasquale Mari, Aimilia Magkanaraki, and Kalliopi Anastasopoulou</i>	
Another Week at the Office (AWATO) – An Interactive Serious Game for Threat Modeling Human Factors	123
<i>Lauren S. Ferro and Francesco Sapia</i>	
Not Annoying the User for Better Password Choice: Effect of Incidental Anger Emotion on Password Choice	143
<i>Laheem Khan, Kovila P. L. Coopamootoo, and Magdalene Ng</i>	

Development of a Test Battery for Cyber Soldiers.	162
<i>Patrik Lif, Jacob Löfvenberg, Per Wikberg, and Ove Jansson</i>	
“Trust Me, You Will Need It”: Cybersecurity as Extracurricular Subject at Estonian Schools.	175
<i>Birgy Lorenz and Kaido Kikkas</i>	
Security Matters ... Until Something Else Matters More: Security Notifications on Different Form Factors.	189
<i>Heather Molyneaux, Elizabeth Stobert, Irina Kondratova, and Manon Gaudet</i>	
A New Hope: Human-Centric Cybersecurity Research Embedded Within Organizations.	206
<i>Phillip L. Morgan, Phoebe M. Asquith, Laura M. Bishop, George Raywood-Burke, Adam Wedgbury, and Kevin Jones</i>	
Sleeping with the Enemy: Does Depletion Cause Fatigue with Cybersecurity?.	217
<i>Andrew Reeves, Dragana Calic, and Paul Delfabbro</i>	
Whose Risk Is It Anyway: How Do Risk Perception and Organisational Commitment Affect Employee Information Security Awareness?.	232
<i>Andrew Reeves, Kathryn Parsons, and Dragana Calic</i>	
The Man in the Besieged Castle: Heuristic Evaluation of Home Security Systems.	250
<i>Luis Martín Sánchez-Adame, Sonia Mendoza, Beatriz A. González-Beltrán, Amilcar Meneses-Viveros, and José Rodríguez</i>	
Natural vs. Technical Language Preference and Their Impact on Firewall Configuration	261
<i>Artem Voronkov and Leonardo A. Martucci</i>	
Analysis of Factors Improving Accuracy of Passive User Identification with Streams of Face Images for Ubiquitous Commerce.	271
<i>Adam Wójtowicz and Jacek Chmielewski</i>	
Privacy and Trust	
To Allow, or Deny? That is the Question.	287
<i>Panagiotis Andriotis and Atsuhiko Takasu</i>	
“Alexa, Are You Spying on Me?”: Exploring the Effect of User Experience on the Security and Privacy of Smart Speaker Users	305
<i>George Chalhoub and Ivan Flechais</i>	

Clearing the Hurdles: How to Design Privacy Nudges for Mobile Application Users	326
<i>Susen Döbelt, Josephine Halama, Sebastian Fritsch, Minh-Hoang Nguyen, and Franziska Bocklisch</i>	
Modelling and Presentation of Privacy-Relevant Information for Internet Users	354
<i>Denis Feth</i>	
Enabling Medical Research Through Privacy-Preserving Data Markets.	367
<i>Shadan Ghaffaripour and Ali Miri</i>	
Understanding Users' Relationship with Voice Assistants and How It Affects Privacy Concerns and Information Disclosure Behavior	381
<i>Charulata Ghosh and Matthew S. Eastin</i>	
Smart Home Security and Privacy Mitigations: Consumer Perceptions, Practices, and Challenges	393
<i>Julie M. Haney, Susanne M. Furman, and Yasemin Acar</i>	
Multi-method Approach Measuring Trust, Distrust, and Suspicion in Information Technology	412
<i>Sarah A. Jessup, Gene M. Alarcon, August Capiola, and Tyler J. Ryan</i>	
Did I Agree to This? Silent Tracking Through Beacons	427
<i>Edden Kashi and Angeliki Zavou</i>	
Perspectives on Information Technology Artefacts in Trust-Related Interactions	445
<i>Holger Koelmann</i>	
Mental Model Mapping Method for Cybersecurity	458
<i>Kaur Kullman, Laurin Buchanan, Anita Komlodi, and Don Engel</i>	
Parents Unwittingly Leak Their Children's Data: A GDPR Time Bomb?	471
<i>Suzanne Prior and Natalie Coull</i>	
An Emerging Strategy for Privacy Preserving Databases: Differential Privacy	487
<i>Fatema Rashid and Ali Miri</i>	
Personal Data Discoverability to Human Searchers: Observations on Personal Data Availability	499
<i>Kirsten E. Richards</i>	
Understanding Privacy and Trust in Smart Home Environments	513
<i>Eva-Maria Schomakers, Hannah Biermann, and Martina Ziefle</i>	

Privacy Apps for Smartphones: An Assessment of Users' Preferences and Limitations.	533
<i>Tanusree Sharma and Masooda Bashir</i>	
Cyberspace and Cyberculture: The New Social and Governance Field	547
<i>Rodolfo Ward, Cleomar Rocha, and Suzete Venturelli</i>	
Usable Security Approaches	
Evaluation of Secure Pad Resilient to Shoulder Hacking	561
<i>Kokoro Kobayashi, Tsuyoshi Oguni, and Masaki Nakagawa</i>	
Smart Assistants in IT Security – An Approach to Addressing the Challenge by Leveraging Assistants' Specific Features	575
<i>Michael Kubach and Heiko Roßnagel</i>	
An Improved Method of Time-Frequency Joint Analysis of Mouse Behavior for Website User Trustworthy Authentication	588
<i>Wei Li, Shuping Yi, Qian Yi, Jiajia Li, and Shiquan Xiong</i>	
Cyber Security Threats and Incidents in Industrial Control Systems.	599
<i>Jens Mehrfeld</i>	
Usable Security by Design: A Pattern Approach	609
<i>Bilal Naqvi and Jari Porras</i>	
Understanding Insider Threat Attacks Using Natural Language Processing: Automatically Mapping Organic Narrative Reports to Existing Insider Threat Frameworks	619
<i>Katie Paxton-Fear, Duncan Hodges, and Oliver Buckley</i>	
Predicting Tap Locations on Touch Screens in the Field Using Accelerometer and Gyroscope Sensor Readings	637
<i>Emanuel Schmitt and Jan-Niklas Voigt-Antons</i>	
Private Cloud Storage: Client-Side Encryption and Usable Secure Utility Functions.	652
<i>Akihiro Tachikawa and Akira Kanaoka</i>	
Time-Lapse Detection for Evolution of Trustworthy Network User Operation Behavior Using Bayesian Network	671
<i>Yuhan Wang, Qian Yi, Shuping Yi, Jiajia Li, and Shiquan Xiong</i>	
Author Index	683