36th Annual HCIL Symposium ~ 2019
APRIL 4, 2019
To be held at the College Park Marriott Hotel & Conference Center, following the iConference 2019
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Advanced Program

Attention >>> new date (April 4) and new Location
During the symposium HCIL faculty and students present their latest work in well polished talks, posters or demos. Tutorials are also offered. Every year we attract about 200 attendees from academia, industry and government agencies. Come and join us!

8:15   Registration & Light Breakfast
9:00  **Plenary Talks**

Welcome Address  
*Niklas Elmqvist, Director of Human-Computer Interaction Lab*

**Usable Security Beyond End Users**  
*Michele Mazurek*

**Translating Accessibility Research into Accessibility Practice**  
*Jonathan Lazar*

**Break**

10:30  **Plenary Talks (continued)**

**Developing Performance Benchmarks for Interactive Analysis Systems**  
*Leilani Battle*

**Assessing the Value of Group Ideation in Intelligence Analysis using Structured and Unstructured Approaches**  
*Yla Tausczik, Mihai Boicu, Gheorghe Tecuci*

**Block-based Comprehension: The Impact of Program Representation on Student Performance**  
*David Weintrop, Heather Killen*

**Lunch**

then we split in parallel sessions

1:00  **Security and Privacy**  
*Chair: Michelle Mazurek*

**CTFs IRL: A Field Study on the Impact of Hacking Competitions on Secure Development**  
*Daniel Votipka, Michelle Mazurek, Hongyi Hu*

**STEM Learning & Computational Thinking**  
*Chair: David Weintrop*

**The Impact of Live Coding in Physical Computing Environments**  
*Lautaro Cabrera, David Weintrop*

**Design**  
*Chair: Eun Kyoung Choe*

**Designing for Sociality in the Garden**  
*Hanuma Teja Maddali, Amanda Lazar*

**FULL-DAY Tutorial**

**Introduction to Usability Testing**  
*Bill Killam*

10:30 am – 4:30 pm

**HALF-DAY Tutorials**

**Color Fundamentals for Digital Content Creation, Visualization and Exploration**  
*Bill Killam*
Understanding the Process of Reverse Engineering
Seth Rabin, Daniel Votipka, Kris Micinski, Jeff Foster, and Michelle Mazurek

Improving Non-Experts’ Understanding of End-to-End Encryption: An Exploratory Study
Wei Bai, Michael Pearson, and Michelle Mazurek

How Entertainment Media Shapes Perceptions of Cybersecurity
Kelsey Fulton, Rebecca Gelles, Alexandra McKay, Richard Roberts, and Michelle Mazurek

Understanding the Role of Privacy and Trust in Intelligent Personal Assistant Adoption
Yuting Liao, Jessica Vitak, Priya Kumar, Michael Zimmer

Privacy and Security Considerations for Digital Technology Use in Elementary Schools
Priya Kumar, Marshini Chetty, Tamara Clegg, Jessica Vitak

Co-Designing Food Trackers with Dietitians: Identifying Design Opportunities for Food Tracker Customization
Yuhan Luo, Peiyi Liu, Eun Kyung Choe

Group Tracking: Exploring tracking behaviors of amateur athletes in club sports teams
Pramod Chundury, Eun Kyung Choe

Rainbow: Prototyping and Simulating Complex Systems with Paper Craft and Augmented Reality
Seokbin Kang, Leyla Norooz, Tammy Clegg, Jon Froehlich

Designing Internet of Things Technologies with and for Older adults
Alisha Pradhan, Amanda Lazar, Leah Findlater

Designing to Illuminate Children’s Scientific Funds of Knowledge Through Social Media Sharing
Kelly Mills, Elizabeth Bonsignore, Tammy Clegg, June Ahn, Jason Yip, Daniel Pauw, Lautaro Cabrera, Kenna Hernley, Caroline Pitt

Digital Stickers for Interest-Driven and Place-Based Learning
Daniel Pauw, Hannoori Jeong, Janet Bih FoFang, Cachanda Orellana, Elizabeth Bonsignore, Tammy Clegg

Designing Binary Learning Games for Middle Schoolers
Merijke Coenraad, Noel Kuriakos, Diane Jass Ketelhutt, Jan Plane, Michel Cukier, David Weintrop

Teaching Fourth Grade Mathematics and Computational Thinking with Sphero
David Weintrop, Janet Bih FoFang, Margret Walton, Janet Walkoe

exploration/
Theresa-Marie Rhyne
1:00 pm – 4:30 pm

Cognitive Science in HCI
(http://hcil.umd.edu/tutorial-cognitive-science-in-hci/)
Tim Clausner
1:00 pm – 4:30 pm

FULL-DAY Tutorial continues till 4:30
Accessibility and Aging
Chair: Hernisa Kacorri
Understanding Adaptive Activities for People With Dementia – From a Practitioner’s Perspective
Emma Dixon, Amanda Lazar
Hands Holding Clues for Object Recognition in Teachable Machines
Kyungjun Lee, Hernisa Kacorri
#HandsOffMyADA: A Twitter Response to the ADA Education and Reform Act
Brooke Auxier, Cody Buntain, Paul T. Jaeger, Jen Golbeck and Hernisa Kacorri
Reviewing Speech Input with Audio: Differences Between Blind and Sighted Users
Jonggi Hong, Christine Vaing, Hernisa Kacorri, Leah Findlater
Improving PDF Accessibility Evaluation and Remediation Tools
Aravind Rajkumar, Jonathan Lazar

Collaboration and Innovation
Chair: Joel Chan
Transactive memory systems in data science teams
Joohee Choi, Yla Tausczik
Does self-selection influence problem solving performance in crowds working on hidden profile tasks?
Xiaoyun Huang, Yla Tausczik
Finding analogies from the Web to inspire innovation
Xin Qian, Joel Chan
Why it’s hard to take notes on technical topics that are actually helpful
Kunal Eapen, Joel Chan
Efficient lossless compression of scientific claims
Matt Erhart, Joel Chan

Understanding Data
Chair: Niklas Elmqvist
Beyond the #Justice hashtags: Understanding digital participation after police-involved deaths
Kimberly Glasgow, Yla Tausczik
Science by Sight: Data Visualization as an Alternative to Equation-based Analytic Methods in Science Instruction
Eric Newburger, Niklas Elmqvist
High-Performance Data Visualization
Zhe Cui, Niklas Elmqvist
ORC Layout: Adaptive GUI layout with OR-constraints
Yue Jiang, Ruofei Du, Christof Lutteroth, Wolfgang Stuerzlinger
Vistrates: A Versatile Platform for Data Analytics
Karthik Badam, Andreas Mathisen, Roman Rädle, Clemens Klokmose, Niklas Elmqvist

All tutorials continue until 4:30 pm
4:30 to 5:30

**Posters and Demos**

The impact of collaborative filtering on technical information exchange discussions on Reddit  
*Jake Cupani, Xiaoyun Huang, Yla Tausczik*

An In-Depth Exploration of the Online Security Advice Ecosystem  
*Noel Warford, Amritha Jayanti, Elissa Redmiles, Michelle Mazurek*

Designing Technology to Increase Adoption of Healthy Behaviors in Men in the Context of Light Food Consumption  
*Diva Smriti, Eun Kyoung Choe*

Paovis for Hypergraph Visualization  
*Catherine Plaisant*

Understanding and Changing Attitudes towards Dementia  
*Shruti Hegde, Himanshi Manglunia, Hernisa Kacorri, Robin Brewer, Amanda Lazar*

Mining the Web to Understand Visualization Tool Usage  
*Arjun Nair, Leilani Battle*

Modeling User Behavior When Exploring Massive Medical Images  
*Ameya Patil, Leilani Battle*

Simulating Brushing and Linking Interactions over Connected Histograms  
*Bj Sallah, Leilani Battle*

Babysteps: A Teachable Step Counter  
*Mayanka Jha, Hernisa Kacorri*

TOR: A Teachable Object Recognizer  
*Jonggi Hong, Jaina Gandhi, Hernisa Kacorri*

Morphic: Unlocking the flexibility, power and simplicity hidden in your computer.  
*TBD*

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