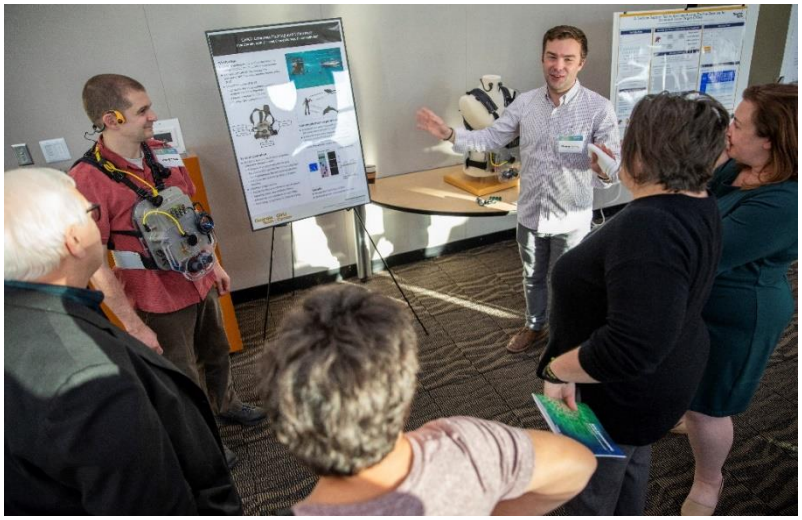
Showcase


757



AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
GTRI/Georgia Tech MSHCI Program	The goal of this project is to design, and elicit feedback on, the preliminary design concept for a mobile resource tool for the Georgia chapter of the National Alliance on Mental Illness (NAMI-GA).	Courtney crooks
GTRI/Georgia Tech MSHCI Program	In this study, we explored several cyber-psychological factors associated with the university student population. The Digital Natives Assessment Scale (DNAS) (Teo, 2013) was used to assess members of the university student population from a variety of disciplines (N=101) on their familiarity with technology. Several additional questionnaires were also presented, capturing data related to a variety of personality, social, and cognitive factors, as well as a robust social networking survey to capture internet and social media platform behaviors and demographic information.	Courtney crooks
Georgia Tech School of Interactive Computing	The goal of this project is to learn whether social media analysis can support mental health clinicians to assess their patients. To achieve the goal, we developed a prototype of a social media augmented assessment tool and conducted user studies with clinicians in which they explore the tool and provide their own opinions, such as whether they could see medical value in it, whether they could understand the system without a problem, and whether they would like to incorporate the system into their work practices.	Dong Whi Yoo Sindhu Ernala Bahador Saket Kelsie Belan Gregory Abowd Munmun De Choudhury

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Georgia Tech School of Interactive Computing	The goal of the project is to create robust sensing system that fuses a comprehensive suite of multimodal sensing modalities for automated modeling of individual differences and job performance. Twin sub-goals include: 1) validating that our proposed sensing streams fused together via machine learning coupled with ground truth reliably predict both individual differences, and in turn, job performances; 2) successfully creting and demonstrating generalizable models that reliably predict individual differences and job performance through only our proposed sensor data streams. In particular, the sensor data streams include bluetooth beacon data, phone agent, garmin fitness wearable, and social media data.	Koustuv Saha, Vedant Das Swain, Dong Whi Yoo, Gregory D. Abowd, Munmun De Choudhury
Georgia Tech School of Interactive Computing	The FIDO team studies technologies to facilitate communication between working dogs and their handlers, as well as temperament assessment tools.	Melody Jackson, Thad Starner, Clint Zeagler, Ceara Byrne, Larry Freil, Jacob Logas
Georgia Tech School of Interactive Computing	The GT BrainLab studies ways of using brain signals alone to control computers and other devices, to help people with severe motor disabilities as well as mainstream users.	Melody Jackson, Thad Starner, Clint Zeagler, Ceara Byrne, Larry Freil, Jacob Logas
Social Dynamics and Wellbeing Lab	Improving the well-being of people with mental illness requires not only clinical treatment but also social support. This research examines how major life transitions around mental illnesses are exhibited on social media and how social and clinical care intersect around these transitionary periods.	Munmun De Choudhury, Sindhu Ernala

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Sonification Lab	Communication is complicated. Face-to-face communication, which many would consider to be the simplest form of communication, becomes a challenge when you consider factors such as differences in language and culture, the use of body language, and tone of voice, etc. These factors inherently make text-based communication more difficult. This project seeks to address these issues through the research and design of communication systems and tools that allow users to gracefully convey such information effectively.	Bruce Walker, Stanley J. Cantrell, Mike Winters
Sonification Lab	Communication is complicated. Face-to-face communication, which many would consider to be the simplest form of communication, becomes a challenge when you consider factors such as differences in language and culture, the use of body language, and tone of voice, etc. These factors inherently make text-based communication more difficult. This project seeks to address these issues through the research and design of communication systems and tools that allow users to gracefully convey such information effectively.	Bruce Walker, Stanley J. Cantrell, Mike Winters
Everyday Computing Lab	We design, deploy, and evaluate mobile health tools that support and meet patients' needs over time from diagnosis of a chronic disease, through treatment and into survivorship. Our research explores the ability for personalized, adaptable, mobile tools to support patients over the course of their individual breast cancer journeys.	Beth Mynatt, Maia Jacobs, Rachel Feinberg

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Everyday Computing Lab	This project aims to define the concept of digital self-harm for the HCI community. In this project we have explored the limited HCI scholarship related to self-harm within a social computing context. We offer the community an operationalized definition of digital self-harm and propose a theoretical base to orientate related research questions into actionable activities. We also describe a research agenda for digital self-harm, highlighting how the HCI community can contribute to the understanding and designing of technologies for self-harm prevention, mitigation, and treatment.	Elizabeth Mynatt, Jessica Pater
Georgia Tech and Emory University	A new transdisciplinary program led by Georgia Tech and Emory to create therapeutic programs, innovations in home and mobile technology, and transformative built environments to empower individuals with mild cognitive impairment and their informal care partners.	Elizabeth Mynatt, Craig Zimring, Jennifer Dubose, Brian Jones, Jeremy Johnson, Brad Fain and many terrific faculty colleagues, Aparna Ramesh, Cooper Link, Judah Krug
Health Experience and Applications Lab (Hx Lab)	Diagnostic radiology reports are increasingly being made available to patients and their family members. However, these reports are not typically comprehensible to lay, recipients, impeding effective communication about report findings. Rapport is a prototype system that aims to facilitate communication about radiology imaging findings among paediatric patients, their family members and clinicians in the clinical setting.	Lauren Wilcox, Matthew Hong, Clayton Feustel, Chaitanya Bapat, Serena Tan

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Health Experience and Applications Lab (Hx Lab)	CO-OP is an interactive mHealth application that utilizes visual illustrations of everyday illness experiences to investigate how technology can support chronically ill patients and family caregivers' collaborative effort to track and co-create personally meaningful representations of everyday illness experiences in non-clinical settings. The system will elicit and probe patients' and family caregivers' observations of illness experiences in relation to everyday activities, and their design input--through a suit of media technology readily available on their mobile device.	Lauren Wilcox, Rosa Arriaga, Matthew Hong, Jung Wook Park
Georgia Tech School of Interactive Computing	OptoSense is a self-powered ambient light sensing surface using commodity photodetectors and photovoltaics on flexible substrates to detect user activities and interactions, such as walking activities and step counting.	Dingtian Zhang, Jung Wook Park, Gregory Abowd, Thad Starner, and many collegues including Georgia Tech Centor for Organic Photonics and Electronics (COPE)
Georgia Tech Research Institute	Engaging Patients and Their Families in Creating More Efficient Patient Centered Care	Megan Denham
Institute for People and Technology and Emory University	Evaluate screening strategies for diabetes type 2 in terms of effectiveness, disparities, and downstream resources required	Doug Bodner, Shivani Patel, Mo Ali, Megha Khan

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Georgia Tech School of Interactive Computing	The goal of this project is to evaluate the efficacy of infrastructure-sensed WiFi data for inferring group activities of college students and use such inference for predicting academic performance.	Hyeokhyen Kwon Vedant Das Swain Bahador Saket Mehrab Bin Morshed Munmun De Choudhury Thomas Ploetz Gregory D. Abowd
Georgia Tech School of Interactive Computing	The goal of this project is to use a real-time eating detection system to understand the eating behavior of college students and investigate how certain behaviors are correlated with students' mental well-being.	Mehrab Bin Morshed Samruddhi Kulkarni Thomas Ploetz Gregory D. Abowd
Georgia Tech School of Interactive Computing	Investigating user-centered design process for improving food journaling experience for college students	Pallavi Chetia Ye-Ji Kim Preston Choe Thomas Ploetz Gregory D. Abowd
Georgia Tech School of Interactive Computing	In the last few years, there has been tremendous growth in the prevalence and widespread use of smart and ubiquitous technologies. These technologies include the use of smartphones, smartwatches and wearables, and smart devices. While these devices have a variety of benefits, they come at the cost of using our data for number of purposes that is not transparent to an average user. This project aims to understand how people perceive regarding privacy concerns with respect to their health data being collected and used by third party entities.	Sooah Moon James O'Connor Koustuv Saha Mehrab Bin Morshed Sauvik Das Munmun De Choudhury Thomas Ploetz Gregory D. Abowd

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Center for Inclusive Design and Innovation	Overview of a series of studies investigating the potential of tele-technology to deliver an evidence-based Tai Chi interventions to adults aging with mobility disabilities	Tracy Mitzner, Elena Remillard, Jordan Chen, and Kara Cohen
Georgia Tech ISyE / Center for Health and Humanitarian Systems	Developing a decision support tool to help patients decide whether to accept an organ offer or wait for a 'better' quality organ	Kirthana Hampapur, Pinar Keskinocak, Ethan Mark, David Goldsman, Brian Gurbaxani, Joel Sokol
Georgia Tech ISyE / Mayo Clinic	This web-based tool aims to improve prenatal care by providing a personalized informational and decision-support tool that integrates the medical history and preferences of the expectant parents. The goal of the tool is to facilitate informed decision-making regarding screening and diagnostic testing during prenatal care.	Akane Fujimoto, Pinar Keskinocak, Turgay Ayer, Jia Yan, Kalyan Pasupathy, Santiago Romero-Brufau, Mustafa Sir, Myra Wick, Lars Nielsen, Laura Rust
Contextual Computing Group	CopyCat and PopSign are two games that help deaf children and their parents acquire language skills in American Sign Language. 95% of deaf children are born to hearing parents, and most of those parents never learn enough sign language to teach their children. As short-term memory skills are learned from acquiring a language, many deaf children enter school with the short-term memory of fewer than 3 items, much less than hearing children of hearing parents or Deaf children of Deaf parents. Our systems address this problem directly.	Thad Starner, Cheryl Wang, Kshitish Deo, Aditya Vishwanath

AFFILIATION	PROJECT SUMMARY	PROJECT CREATOR(S)
Contextual Computing Group	Working with Dr. Denise Herzing of the Wild Dolphin Project, we are creating wearable computers for conducting two-way communication experiments with cetaceans. With CHAT, one researcher uses the waterproof system to broadcast a sound, associated with an object with which dolphin's like to play. A second researcher, upon detecting the sound, passes the object to the first. The researchers pass objects back and forth, further associating the sound with the object. The goal is to see if the dolphins mimic the sound in order to "ask" for the play object.	Thad Starner, Scott Gilliland, Chad Ramey
Computer-Mediated Communication, Social Computing, Accessibility	Emojis have become the ubiquitous language of the 21st century. People across a variety of cultures use emojis, but do we know what they actually mean? We deployed a survey to capture the meanings of the 100 most commonly used emojis on Twitter.	Stanley J. Cantrell, Sonam Singh, Dr. Bruce Walker