GHTC 2016
Humanitarian Applications of Mobile/Wireless Devices Panel
Saturday Afternoon

This panel will discuss the usage of mobile technology in innovations deployed in emerging markets and impoverished areas. The panelists will share their experience and the difficulties encountered in different places and situations.

Rich Fletcher is currently a research scientist at MIT D-Lab and an assistant professor at the University of Massachusetts Medical School. Dr. Fletcher directs the Mobile Technology Group within the MIT D-Lab which develops a variety of mobile sensors, software, and algorithms to study problems in global health and behavior medicine. Dr. Fletcher earned degrees in Physics, Electrical Engineering and Information Technology from MIT, and has been conducting global health projects for over 15 years, with funding from NIH, USAID, Bill and Melinda Gates Foundation, and Vodafone Americas Foundation.

Steve Feng received his B.S. and M.S. in Electrical Engineering from the University of California, Los Angeles (UCLA). Steve's research interests revolve around image analysis, signal processing, parallel computing, machine learning, computer vision, and mobile health. His work has resulted in 12 refereed journal papers and 3 patents. Since 2010, Steve has contributed to the UCLA Bio- and Nano-Photonics Laboratory under Professor Aydogan Ozcan (EE/BE departments). Steve currently holds an Associate Development Engineer position leading computational imaging and mobile development projects for mobile health, environmental sensing, and diagnostic imaging platforms. Steve has also performed as a software engineer consultant to Cellmic LLC since 2013, providing Android mobile development and server-side support for their mobile diagnostics platforms.

Tim Burke is a social entrepreneur working to empower organizations around the world to better track their activities using low-cost remote monitoring tools. He cofounded Arch with this goal in 2015. Previously he did his PhD in organic photovoltaics at Stanford University and spent three years as a Peace Corps volunteer in rural Panama designing the country's first community-built and operated pico-hydropower system.

Sona Shah is co-founder and CEO of Neopenda, a global health startup passionate about using technology to reduce newborn mortality in low-resource settings. Upon completion of her BS in Chemical Engineering from Georgia Tech, Sona spent two years working as an engineer in the Bioprocess Research and Development department at Eli Lilly and Company. After spending time as a teacher in Kenya, and returning as a volunteer with Engineers Without Borders, Sona's passion for helping impoverished communities is further demonstrated by her research involvement at Columbia with mChip, a point-of-care diagnostic device for HIV and Syphilis. She has also worked at the TB Alliance, both in community engagement and drug discovery for medications that treat tuberculosis. Sona recently completed her MS in Biomedical Engineering at Columbia University in May 2016, and aspires to merge her passions for global health and technology by creating innovative

technologies to help some of the world's most vulnerable populations.

Cody Finke, originally from Seattle, WA, graduated from Carleton College in Northfield, MN with a BA in Chemistry with distinction. While at Carleton, Cody was honored as a Goldwater Scholar. After college, Cody worked variously as a lobsterman and bus boy, trying to ski as much as possible in the Sawtooth, Teton, and Cascade ranges. Cody eventually decided to leave the potentially lucrative career path of the Ski Mountaineer to join the Engineering and Applied Sciences Division at Caltech as a PhD student. While at Caltech, Cody's research interests have been to develop technologies to help solve the global environmental crisis. So far projected have included forming a fundamental understanding of electrocatalysis for wastewater treatment and energy storage and developing software to ensure the long term functionality of wastewater treatment technologies in the developing world.

Dr. Navid Amini is a research faculty member at UCLA Stein Eye Institute, a researcher at UCLA Wireless Health Institute, and a founding member of the project EyeSee. His research interests lie broadly in medical informatics with emphasis on wearable sensing and computing technologies for wireless health applications. He is currently utilizing the mobile technology to investigate the effects of various visual impairments on quality of life in affected individuals. He received his B.Sc. degree in computer engineering from Sharif University in 2007. He earned his M.Sc. and Ph.D. degrees both in computer science from UCLA in 2010 and 2012. His doctoral research led to the development of the UCLA Smart Insoles, a wireless computing platform that has been used in multiple clinical trials for gait analysis, activity monitoring, and plantar pressure measurement. His Ph.D. was followed by a postdoctoral fellowship in which he was a principal investigator of an NIH-funded proposal to investigate the risk of falls in glaucoma patients. He has served on the Technical Program Committee for several conferences in the fields of wireless networks, mobile computing, and data analytics. He is a named inventor on three US patents, two of which have been licensed and moving towards commercialization. He is the recipient of the Edward K. Rice Outstanding Doctoral Student Award, UCLA Chancellor[1]s Award for Postdoctoral Research, Alcon Young Investigator Award, and the Vodafone Wireless Innovation Award. He has received unrestricted gifts from influential companies such as Google and Symantec for pursuing end-to-end collaborative research.

MODERATOR

Fredrik Winsnes, Senior Director, Global Programs with NetHope is currently responsible for the Network Solutions Center. Through education and collaboration, the NetHope Solutions Center aims at assisting the 49 NetHope members and likeminded organizations to maximize their benefit from adopting enterprise technology and impactful ICT program solutions. He is also responsible for the NetHope Leadership Institute, and supports the NetHope Academy as well as the Health Communications Capacitive Collaborative (HC3) partnership with Johns Hopkins University. Prior to joining NetHope in 2010, Winsnes spent over 16 years with Microsoft in various management roles ranging from pre-sales activities through solutions and product development. Privately, from 2005 to 2009, parallel to his role at Microsoft, Winsnes was engaged in PC lab deployments in secondary schools in Uganda – "Computers for Uganda". Initially as a leader for a student summer program through the Forest Ridge School of the Sacred Heart in Bellevue, WA, and subsequently by incorporating InterConnection Uganda Ldt., as a commercial, self-sustaining PC import and refurbishing social enterprise. Winsnes, a native of Norway, has a bachelor's degree from the Norwegian School of Management in Oslo and MBAs in finance and marketing from the University of Wisconsin, Madison.