



THE AMERICAN UNIVERSITY IN CAIRO

الجامعة الأمريكية بالقاهرة

AUC International Conference on Research in African Challenges (ICRAC)

Track S: Science contribution to alleviating poverty

SUB-TRACK S7: POVERTY IN THE DIGITAL WORLD

Chair: Dr. Tamer ElBatt

Co-chair: Dr. Arjuna Sathiaseelan

This conference sub-track solicits original, unpublished work on the key role of information and computing technologies in realizing Digital Transformation which is projected to play a pivotal role in combating poverty and developing societies in disadvantaged, rural communities in Africa, in particular, and in developing countries around the globe. This includes, but is not limited to, the important role of innovative digital technologies in: understanding and analyzing poverty dynamics, agriculture and food security, safety and security, combating illiteracy, education, management of natural resources, preventing energy poverty, healthcare services, public health, preventive medicine, reducing unemployment rates, economic growth, transportation, cost-effective Internet connectivity for rural, underserved communities, society development, sustainable societies, trading and services on the go, e.g., mHealth, mEducation, mCommerce, etc.

Biographies

Tamer ElBatt joined the Department of Computer Science and Engineering at The American University in Cairo as an associate professor in July 2017. He received his BS and MS degrees in Electronics and Communications Engineering from Cairo University, Egypt in 1993 and 1996, respectively, and his PhD degree in ECE from the University of Maryland, College Park, USA in 2000. From 2000 to 2009, he was with HRL Labs, United States, SDRC, United States and Lockheed Martin ATC, United States at various positions. From 2009 to 2017, he was with the EECE Department, Cairo University, as an assistant professor and later as an associate professor (currently on leave). He held a joint appointment with Nile University, Egypt from 2009 to 2017 and served as the director of the wireless center (WINC) from 2012 to 2017. ElBatt research has been supported by DARPA, ITIDA, QNRF, FP7, H2020, GM, Microsoft, Google and Vodafone Foundation and is currently supported by the NTRA. He has published more than 100 papers and holds seven US patents.

ElBatt is a senior member of the IEEE and has served on the TPC of numerous IEEE and ACM conferences. He served as the demos co-chair of ACM Mobicom 2013 and the publications co-chair of IEEE Globecom 2012 and EAI Ubiquitous 2014. ElBatt currently serves on the editorial board of IEEE TCCN and Wiley IJSCN and has previously served on the editorial board of IEEE TMC. ElBatt has also served on U.S. NSF and Fulbright review panels. ElBatt was a visiting professor at Politecnico di Torino, Italy, Sabanci University, Turkey and University of Padova, Italy. Tamer is the recipient of the 2014 Egypt's State Incentive Award in Engineering Sciences, the 2012 Cairo University Incentive Award in Engineering Sciences and the prestigious Google Faculty Research Award in 2011. His research interests lie in the broad areas of performance analysis, design and optimization of wireless and mobile networks.

Arjuna Sathiaseelan

Dr. Arjuna Sathiaseelan is the CEO of the Ammbr Research Labs (part of the AmmbrTech group) and the Co-Founder of GAIUS Networks. Before moving to the industry, Dr Arjuna Sathiaseelan directed the Networking for



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Development (N4D Lab) at the Computer Laboratory, University of Cambridge. The research group conducted research on novel Internet architectures for improving and reducing the cost of Internet access. He founded and chaired the IRTF Global Access to the Internet for All (GAIA) research group and was a member of the Internet Research Steering Group (IRSG). He was in the Access Advisory Panel of the United Nations Foundation's \$75 million Digital Impact Alliance (funded by the Melinda and Gates Foundation, USAID and SIDA). He is in the advisory board of Tresorio Hub focused on green edge computing infrastructure, Ubuntu Power - a social enterprise focused on providing affordable off grid energy and Internet to underserved communities and Ensemble- a social business incubator in Democratic Republic of Congo. He is also in the advisory board of the EU NETCOMMOMS project. He is a member of the Center for Science and Policy (CSaP). He is also a member of the Cambridge Big Data initiative as a principal investigator interested in big data for development and understanding the interplay between users, networks and data for development and humanitarian crisis.

His research interests also include architecting the Future Internet, enabling quad-play (voice, video, data, and mobility) convergence and mobile systems especially inter-RAT mobility. He has co-authored and contributed to several Internet standards and drafts (IETF) and contributed to the DVB-RCS2 standardization at the ETSI TM-RCS.

In the past he was a Research Fellow (Connected Digital Economy - Rural Digital Economy hub and Networking - School of Engineering) at University of Aberdeen. He was also an Associate with the Center for Sustainable International Development (CSID) at Aberdeen where he founded and convened the ICT4D group.

He was also the Chief Evangelist at United Mobile Apps, India, where he helped the company raise one million dollars in venture capital funding.

Arjuna Sathiaselvan has a PhD in Networking from Kings College London (2005), MSc in Computing and Internet Systems from Kings College London (2001) and Bachelors in Computer Science and Engineering from NIT, Trichy, India (2000). He was awarded the Young Alumni Achiever Award from NIT Trichy (2016).