Biographical sketches of AE candidates

ARYA MAZUMDAR (U-MASS/AMAZON)

CHAO TIAN (TEXAS A&M)

MARCO TOMAMICHEL (UNIVERSITY OF TECHNOLOGY, SIDNEY)

LIGONG WANG (CNRS, CERGY-PONTOISE)
ARYA MAZUMDAR

Biography: Arya Mazumdar is an Associate Professor of Computer Science, with additional affiliations to Department of Mathematics and Statistics, and Center for Data Science, at the University of Massachusetts Amherst (UMass). He is on leave from UMass now at Amazon AI and Search Sciences at Berkeley, CA. In the past, he was a faculty member at University of Minnesota-Twin Cities, and a postdoctoral scholar hosted by Prof. G. W. Wornell, at Massachusetts Institute of Technology. Arya received his Ph.D., advised by Prof. A. Barg, from the University of Maryland College Park, in 2011, where his thesis won the Distinguished Dissertation Fellowship. Arya is a recipient of an NSF CAREER award (2015) and an ISIT Jack K. Wolf Student Paper Award (2010). Arya’s research interests include statistical machine learning, coding theory (error-correcting codes and related combinatorics), and information theory.

Website: https://people.cs.umass.edu/~arya/

Representative Publications

Chao Tian

**Biography:** Chao Tian received the B.E. degree in Electronic Engineering from Tsinghua University, Beijing, China, in 2000 and the M.S. and Ph. D. degrees in Electrical and Computer Engineering from Cornell University, Ithaca, NY in 2003 and 2005, respectively. Dr. Tian was a postdoctoral researcher at Ecole Polytechnique Federale de Lausanne (EPFL) from 2005 to 2007, a member of technical staff--research at AT&T Labs--Research in New Jersey from 2007 to 2014, and an Associate Professor in the Department of Electrical Engineering and Computer Science at the University of Tennessee Knoxville from 2014 to 2017. He joined the Department of Electrical and Computer Engineering at Texas A&M University in 2017. His research interests include source coding, data storage systems, multi-user information theory, joint source-channel coding, signal processing, and compute algorithms. He was an Associate Editor for the IEEE Signal Processing Letters from 2012 to 2014, and is currently an Editor for the IEEE Transactions on Communications.

**Web site:** [https://tiangroup.engr.tamu.edu/](https://tiangroup.engr.tamu.edu/)

**Selected publications:**


Marco Tomamichel

**Biography:** Marco Tomamichel received a M.Sc. in Electrical Engineering and Information Technology degree from ETH Zurich in 2007, and then graduated with a Ph.D. in Physics from the Institute of Theoretical Physics at ETH Zurich in 2012. After that he was a Research Fellow at the Centre for Quantum Technologies at the National University of Singapore, where he continues to be engaged as a Visiting Researcher. He is currently an Associate Professor at the Centre for Quantum Software and Information and School of Software, Faculty of Engineering and Information Technology at the University of Technology Sydney.

His research interests lie in the intersection of information theory, cryptography and quantum mechanics, with the main focus on the mathematical foundations of quantum information theory, for example the study of entropy and other information measures, as well as theoretical questions that arise in quantum communication and cryptography when the available resources are limited. He is a Senior Member of the IEEE information theory society.

**Email:** marco.tomamichel@uts.edu.au

**Website:** http://www.marcotom.info

**Selected Publications:**


Ligong Wang

Biography: Ligong Wang received the Bachelor of Engineering degree in electronic engineering from Tsinghua University, Beijing, China, in 2004, and the Master of Science and Doctor of Science degrees in electrical engineering from ETH Zurich, Switzerland, in 2006 and 2011, respectively. In the years 2011–2014 he was a Postdoctoral Associate at the Department of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology, Cambridge, MA, USA. He is now a researcher (chargé de recherche) with CNRS, France, and is affiliated with ETIS laboratory in Cergy-Pontoise. His research interests include classical and quantum information theory, physical-layer security, and digital, in particular optical communications.

Web site: http://perso-etis.ensea.fr/ligong.wang/

Selected publications:


