

Title	<i>Embedded Keynote: Privacy this unknown - The new design dimension of computing architecture</i>
Speaker	Mauro Conti, University of Padua, Italy

Abstract

The Security is often presented as being based on the CIA triad, where the “C” actually stands for Confidentiality. Indeed, in many human activities we like to keep some(things) confidential, or “private”; this is particularly true when these activities are done in the cyber world where a lot of our private data are transmitted, processed, and stored.

In this talk, we will first introduce the concept of privacy, and then see how this is interlaced with two important research threads. First we’ll discuss how computer architectures and particularly “trusted components” in processors could be helpful to protect privacy, allowing us to trust remote systems. Finally, we’ll discuss the issues of side-channels (in a broad sense, not only in processors) that could lead to leak of private information.



Biography

Mauro Conti is Full Professor at the University of Padua, Italy. He is also affiliated with TU Delft and University of Washington, Seattle. He obtained his Ph.D. from Sapienza University of Rome, Italy, in 2009. After his Ph.D., he was a Post-Doc Researcher at Vrije Universiteit Amsterdam, The Netherlands. In 2011 he joined as Assistant Professor the University of Padua, where he became Associate Professor in 2015, and Full Professor in 2018. He has been Visiting Researcher at GMU, UCLA, UCI, TU Darmstadt, UF, and FIU. He has been awarded with a Marie Curie Fellowship (2012) by the European Commission, and with a Fellowship by the German DAAD (2013). His research is also funded by companies, including Cisco, Intel, and Huawei. His main research interest is in the area of Security and Privacy. In this area, he published more than 350 papers in topmost international peer-reviewed journals and conference. He is Area Editor-in-Chief for IEEE Communications Surveys & Tutorials, and Associate Editor for several journals, including IEEE Communications Surveys & Tutorials, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Dependable and Secure Computing, and IEEE Transactions on Network and Service Management. He was Program Chair for TRUST 2015, ICISS 2016, WiSec 2017, ACNS 2020, and General Chair for SecureComm 2012 and ACM SACMAT 2013. He is Senior Member of the IEEE and ACM. He is a member of the Blockchain Expert Panel of the Italian Government.