

## SCIENTIFIC FOCUS AREA

The research focus of Dr. Lucani is on network coding, wireless communications and networks, and Cloud storage. Network coding constitutes a new paradigm in network theory and practice, which encourages the network to algebraically combine (mix) different data packets at intermediate nodes through coding, rather than storing and forwarding copies of packets that are routed through the network. Thus, it enables the design of disruptive algorithms and protocols for wireless networks with added resiliency, energy, delay, and throughput benefits. Dr. Lucani has made research contributions on highly volatile environments that are challenged by large latency, high packet losses, and/or half-duplex constraints. More specifically, Dr. Lucani has showed the potential of tailoring feedback and coding in order to yield order of magnitude improvements in such environments. Dr. Lucani's style lies between theory and practice, with a focus on bringing theoretical concepts into practical schemes leading to fruitful collaborations and projects with industrial partners, e.g., Portugal Telecom Inovação, Steinwurf ApS, Cisco, and other research institutions, e.g., the European Space Agency.

## INTERNATIONAL RELATIONS

Dr. Lucani maintains active collaboration with a variety of international partners, including, Prof. Muriel Médard (MIT), Prof. Milica Stojanovic (Northeastern University), Prof. Peter Steenkiste (CMU), Prof. Joerg Klierer (New Jersey Institute of Tech.), Dr. Marie-José Montpetit (MIT), Prof. João Barros (Univ. of Porto), Prof. Frank Fitzek (TU Dresden), Prof. João Sousa (Univ. of Porto), Prof. S. Palazzo (U. Catania), Dr. Nader Alagha (ESA)

## EDUCATION

2010	Massachusetts Institute of Technology Ph.D in Electrical Engineering
2006	Universidad Simón Bolívar Master in Electronics Engineering with Honors
2005	Electronics Engineer Summa-Cum Laude

## PRESENT AND RECENT POSITIONS (Not complete)

Apr. 2017 -	Aarhus University, Denmark. Associate Professor Dept. of Engineering (Top level, Tenure)
Aug. 2012- Mar. 2017	Aalborg University, Denmark. Associate Professor Dept. of Electronic Systems
June 2014 -	Chocolate Cloud ApS. CEO and co-founder
Apr. 2010 - Jul. 2012	Universidade do Porto, Portugal. Assistant Professor

## SUPERVISION OF STUDENTS AND TEACHING

- Supervised 6 Ph.D students and supervising 4 Ph.D students (2 defending in 2017)
- Supervised 6 Master theses at AAU and 3 Master theses at University of Porto
- Supervised 7 master-level projects at AAU and 2 at U. Porto, 4 undergraduate projects at AAU
- Internal evaluator in two doctoral research qualifier committees at U. Porto
- External examiner in five doctoral theses and Committee Chairman in three defenses at AAU
- At U. Porto: taught course on Information and Communication, Probability and Statistics, Security in Systems and Networks. Committee member planning the Masters in Information Engineering
- Active teaching at AAU on Network Coding and Cooperation in Wireless Networks, as well as Ph.D level courses on network coding and codes for 5G as well as Summer Schools at AAU in those topics
- Experience teaching groups ranging from 10 to 350 students in three languages