# September 30, 2022, 11:45 am - 1:15 pm local time (Greece)

## Panel Title - Privacy Challenges in the Digital Health Transformation

**Abstract** - Privacy in healthcare is becoming more complex as our lives become increasingly digital and decentralized. There is an explosion of sensitive data being collected and processed by health care devices and networks, in addition to data that some might consider less sensitive by smart devices that measure our well-being. What are our rights as users and patients? How do we allow researchers to continue to make data-driven innovation? Are there gaps in current legislation to protect personal health information and other personal data? Join a diverse and engaging panel as we explore these questions and more.

Moderator: Prof. Dr. Neeli Prasad, Chair, Healthcare Subgroup, IEEE Digital Privacy Initiative

## Panelists:

- Dr. Dan Bogdanov, Cybernetica
- Dr. Agata Ferretti, ETH Zurich
- Prof. Dr. Charalampos Z. Patrikakis, University of West Attica
- Prof. Dr. Med. Matthias Simon, University of Bielefeld Medical Center OWL

#### Neeli R. Prasad



Prof. Dr. Ir. Neeli R. Prasad, Co-Founder & CTO of SmartAvatar B.V., Netherlands and TrustedMobi "VehicleAvatar Inc.", Mountain View, CA, USA, IEEE VTS Board of Governor VP Membership.

Neeli is a cybersecurity, networking and IoT strategist. She has throughout her career been driving business and technology innovation, from incubation to prototyping to validation and is currently an entrepreneur and consultant in Silicon Valley. She has made her way up the "waves of secure communication technology by contributing to the most groundbreaking and commercial inventions. She has general management, leadership and technology skills, having worked for service providers and technology companies in various key leadership roles. She is the advisory board member for the European Commission H2020 projects. She is also a vice chair and patronage chair of IEEE Communication Society Globecom/ICC Management & Strategy Committee (COMSOC GIMS) and Chair of the Marketing, Strategy and IEEE Staff Liaison Group. She is Director of CGC, USA, full Professor at Department of Business Development and Technology (BTech), Aarhus University and was assistant head of department and Professor, Electrical and Computer Engineering at International Technological University (ITU), USA.

Dr. Prasad has led global teams of researchers across multiple technical areas and projects in Japan, India, throughout Europe and USA. She has been involved in numerous research and development projects. She also led multiple EU projects such as CRUISE, LIFE 2.0, ASPIRE, etc. as project coordinator and PI. She has played key roles from concept to implementation to standardization. Her strong commitment to operational excellence, innovative approach to business and technological problems and aptitude for partnering cross-functionally across the industry have reshaped and elevated her role as project coordinator making her a preferred partner in multinational and European Commission project consortiums.

She has 4 books on IoT and WiFi, many book chapters, peer-reviewed international journal papers and over 200 international conference papers. Dr. Prasad received her Master's degree in electrical and electronics engineering from Netherland's renowned Delft University of Technology, with a focus on personal mobile and radar communications. She was awarded her Ph.D. degree from Università di Roma "Tor Vergata", Italy, on Adaptive Security for Wireless Heterogeneous Networks.

# **Dan Bogdanov**



Dr. Dan Bogdanov met his first significant privacy challenges while working with the data collection systems of the Estonian Genome Center. This inspired him to start researching cryptographic solutions for privacy problems. He is the inventor of Sharemind, a secure multi-party computation system for collecting, sharing and processing private data. Sharemind is a new kind of computer that analyses digital data without seeing the individual values. This achieves beyond-the-state-of-the-art data protection, as has been demonstrated in various applications processing tax, education, genomic and financial data. Today, Dan is the Chief Scientific Officer at Cybernetica, leading R&D on new technologies for privacy, identity, cybersecurity and e-government.

### **Agata Ferretti**



Dr. Agata Ferretti is postdoctoral researcher at the Health Ethics & Policy Lab, Department of Health Science and Technology, ETH Zurich. Agata has a background in philosophy, bioethics and global health policy. During her undergraduate and master's degrees, she studied at the State University of Milan (Italy) and KU Leuven (Belgium). Before joining ETH, she earned a MSc in Global Health Policy from the London School of Economics and Political Science (UK). Her PhD, supported by the Swiss National Science Foundation, focused on the ethics and governance of big data in health research and digital health.

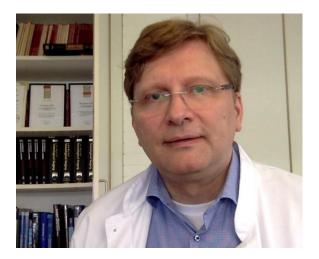
Leveraging both conceptual and empirical research methods, her work aims to address ethical and normative questions in digital health. Her academic interests include ethical uses of artificial intelligence and mobile technologies (e.g., health apps, wearable devices) for health, ethics and governance of big data, ethical oversight mechanisms in biomedical research, public and global health ethics, neuroethics and neuroenhancement. Currently, Agata is exploring ethical and governance issues related to the use of digital technologies for youth health promotion in low- and middle-income settings.

### **Charalampos Z. Patrikakis**



Charalampos Z. Patrikakis is a Professor at the Dept. of Electrical and Electronics Engineering of UNIWA on the Design and Implementation of Interconnected Electronic Systems and Services, with emphasis on data collection and processing. He is a founding member of THINGENIOUS, a spinoff company of UNIWA. He has been adjunct lecturer at NTUA and AUA, while he has worked for 20 years as a researcher at various laboratories of ICCS, NTUA and AUA. He is currently the Director of CoNSeRT lab, which researches on AI, Cloud Computing and Networking, Web and Internet of Things and Blockchain technologies and for the design and implementation of mobile and network applications and services. He is also the Director of the MSc Program "Artificial Intelligence and Deep Learning". His research experience includes participation in in over 50 research projects, from which in more than 20 he has been involved as technical coordinator or principal researcher. He has over 200 publications in chapters of books, international journals and conferences, and has 2 contributions in national legislation. He has been a member of the editorial committee of more than 60 issues in international journals and conferences, and has acted as editor in the publication of special issues of international journals, conference proceedings volumes and coedited three books.. He is currently AEiC of IEEE IT Professional Magazine, responsible for Special Issues, IEEE Senior Member of IEEE, IEEE Computer Distinguished Contributor, Member of the Technical Chamber of Greece, and counselor of the IEEE Student Branch of UNIWA.

#### **Matthias Simon**



Prof. Matthias Simon graduated from Medical School in Hamburg, Germany. After working as a postdoctoral fellow in the Depts. of Neurosurgery and Molecular Genetics at the Univ. of Cincinnati, USA, he trained with Johannes Schramm at the University of Bonn Dept. of Neurosurgery, Germany, where he became Attending Neurosurgeon in 2005 and Vice-Chairman of the department in 2013. In 2016 he moved to Bielefeld, Germany, as Chairman of the University of Bielefeld Bethel Dept. of Neurosurgery. He attended the EANS training course from 1999 to 2003. From 2018 to 2020 he served as one of the EANS Individual Members' Delegate, and was re-elected for a second term in 2021.

Prof. Simon chaired the Neuro-oncology Working Group of the German Society of Neurosurgery from 2010-2018, and he was the local coordinator for the German Glioma Network in Bonn from 2004-2012.

Prof. Simon's major clinical focus is the surgical treatment of deep-seated gliomas and meningiomas, but his practice also includes a very sizable number of vascular, pediatric, instrumented spine and epilepsy surgery cases. His main research interests are molecular genetics of meningiomas and gliomas, molecular and interdisciplinary neuro-oncology, and the surgical treatment of various brain tumours. He participated in several large genome-wide association studies which aimed at deciphering the genetic predisposition to gliomas and meningiomas (as well as aneurysms and AVMs). Additional scientific interests include tumor-associated epilepsy and epilepsy surgery.