### **CONASENSE2022** Keynote Speeches

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#### 1. Introduction

The keynote session of CONASENSE2022 counted with four short talks provided by industrial experts from IBM, Eclipse Foundation, Infineon, and Unternehmer TUM.

Felizitas Müller, IBM, introduced the IBM Innovation Studio Munich as an innovation catalyzer, open to external entities.

Florian Küster, UnternehmerTUM, presented the large enterpreneurial hub of Munich, UnternehmerTUM and in particular the new MakerSpace, appealing to developers and startups, as well as entrepreneurs.

Gael Blondelle, Eclipse Foundation, addressed the relevancy of the use of open-source in future services, explaining the trade-offs.

Avik Santra, Infineon, presented an AI-based sensing approach for IoT building applications like lighting/HVAC controls, location-based services, and describe AI architectures for sensor data processing.

This part provides title, short abstract and short biography for the speakers. All presentations are available via the CONASENSE Website.

#### 2. IBM Innovation Studio Munich, Felizitas Müller, IBM



**Bio**: After studying business administration at the University of Applied Sciences in Constance, Felizitas, started her professional career in Strategic Sales at IBM Technology Support Services. In addition to her work at IBM, she completed a Master's degree in Strategic Sales Management at the ESB in Reutlingen. Since 2018, she is working as a project manager within the IBM Sustainability Software Business Unit responsible for software implementation projects. Since 2021, she is

leading the "Center for AI" (research center for artificial intelligence between fortiss and IBM) from IBM-side.

### 3. UnternehmerTUM - We turn visions into value, Florian Küster, UnternehmerTUM MakerSpace

<u>Abstract</u>: Learn how the largest European entrepreneurship center supports start-ups from idea to IPO and how your team can benefit.



Florian is part of the management board at UnternehmerTUM where he is responsible for running the high-tech workshops of MakerSpace. In addition, Florian is Venture Director Robotics/AI at TUM Venture Labs, an initiative of TU Munich that helps transferring research to applicable products and services. Florian holds a M.Sc. and

Diplome Grande Ecole in Management from ESCP Europe.

## 4. THE EU PLATFORM FOR IOT AND EDGE MUST BE OPEN SOURCE!, GAËL BLONDELLE, ECLIPSE FOUNDATION

<u>Abstract</u>: This talk will cover why Europe needs a widely adopted open source IoT and Edge platform. Of course, interoperability and scalability come to mind, but beyond that, digital sovereignty should also be a strong incentive. And finally, this is also an opportunity to show the EU leadership and to better disseminate our research efforts to industry players.



**Gaël Blondelle** joined the Eclipse Foundation in 2013 where he is now Managing Director of Eclipse Foundation Europe GmbH and VP, Ecosystem Development, of the Eclipse Foundation. Gaël joined the Eclipse Foundation with the desire to help organizations to work in open source as the best way to implement

open innovation and open collaboration. Gaël has been involved in open source for more than 18 years in various roles, including as an entrepreneur, as a business developer, and as a manager of a large European research project aiming to create an open source ecosystem for industrial players.

# 5. AI BASED SENSING FOR IOT BUILDING APPLICATIONS, AVIK SANTRA, INFINEON

Abstract - Sensing technologies play an important role in realizing smart, energy-efficient and sustainable buildings. Sensors of different modalities are part of building infrastructures, like lighting, HVAC and surveillance, that are

increasingly becoming connected. Data from such multi-modal IoT sensors can be used to realize new and improved building applications using advanced signal processing and machine learning. In this talk, we will cover topics, such as IoT building applications like lighting/HVAC controls, location-based services, and describe AI architectures for sensor data processing.



Avik Santra received his M.S. in Signal Processing (Hons) from Indian Institute of Science, Bangalore and Ph.D. in Electronics, Electrical and Informatics (summa cum laude) from FAU University of Erlangen. He is currently heading the advanced AI team developing signal processing and machine learning algorithms for industrial and consumer radars and depth sensors at Infineon, Neubiberg. Earlier in his career, he has worked as system engineer for LTE/4G

modem at Broadcom Communications, and also has worked as research engineer developing cognitive radars at Airbus. He is co-author of the book titled 'Deep Learning Applications of Short-Range radars', published by Artech House and has filed more than 70 patents and published over 50 papers. He is a Senior Member of IEEE.