### **WELCOME**

SoftNet 2021

October 3-7, 2021, Barcelona, Spain

ICSEA, ICSNC, CENTRIC, VALID, SIMUL, SOTICS, INNOV, HEALTHINFO

Enjoy permanent free access to the .pdf presentations and/or prerecorded videos along with their corresponding papers.

### MANY THANKS FOR YOUR HARD WORK AND SUPPORT

Tough times ask for tough scientists and here you are. Authors, Chairs, Reviewers, Logistics acted exemplarily and put together an exceptional program.

### FOUR TUTORIAL LECTURERS

Theme: IQRF Basics: A technology for Wireless Packet-oriented Communication via Radio Frequency (RF) in sub-GHz ISM Bands MICRORISC s.r.o. Czech Republic

Part I. IQRF Basic
Jaromír Mastík, MICRORISC s.r.o. Czech Republic

Part II. An Intelligent IQRF Gateway
Martin Špiller, MICRORISC s.r.o. Czech Republic

Part III. Smart school Ivona Spurna, MICRORISC s.r.o. Czech Republic

Theme: The Goal/Question/Metrics (GQM) Method in the Era of Data-driven Projects Luigi Lavazza, University of Insubria at Varese, Italy

# 10 KEYNOTE SPEAKERS (I)

Theme: Tchaikovsky Riddles or How Software Technology Can Contribute to Musicology

Prof. Dr. Evgeny Pyshkin, University of Aizu, Japan

Theme: Where is the IQRF® Going to?

Dr. Vladimir Sulc, MICRORISC s.r.o., Czech

Theme: Machine Learning Software Engineering Patterns: Classification and Practitioners' Insights Prof. Dr. Hironori Washizaki, Waseda University / National Institute of Informatics / System Information, Japan

Theme: Reflections on the Future of the Software Industry: Mighty Disruptor or Disruptee?

Prof. Dr. Herwig Mannert, University of Antwerp, Belgium

Theme: Consistency Verification of Processes: From Businesses to Cyber-physical Systems

Prof. Dr. Hermann Kaindl, Vienna University of Technology, Austria

# 10 KEYNOTE SPEAKERS (II)

Theme: Validation and Verification of Artificial Intelligence Systems: Where do We Stand?

Prof. Ph.D. MBA Ahmed Kamel, Concordia College - Moorhead, USA

Theme: AI and Robotics in Upstream Oil and Gas

Petroleum Scientist, Ph.D. Abdallah A. Alshehri, Saudi Aramco, Dhahran, Saudi Arabia Dr. Klemens Katterbauer, Saudi Aramco, Dhahran, Saudi Arabia

Theme: Application of Biological Domain Knowledge-based Feature Selection on Gene Expression Data Assoc. Prof. Dr. Malik Y. Yousef, Zefat Academic College, Israel and Pranab K. Sen Distinguished Visiting Professor, University of North Carolina at Chapel Hill, USA

Theme: Mechanics of Misinformation: What? How? and Why?

Prof. Dr. Nitin Agarwal, University of Arkansas at Little Rock, USA

# THREE EXPERTS PANELS (I)

### **SoftNet Experts Panel I**

### Theme: Challenges on Development/Simulation/Validation for Citizen-centric Systems

(man-in-the-middle, self-regulatory systems, cognitive systems, immersive environments, special interfaces, adapted systems life-cycles, system specifications, etc.)

#### Chair

Stephan Böhm, University of Applied Sciences Wiesbaden, Germany

#### **Panelists**

Lisa Taubensee, Advantest, Germany

Alexander Kröner, Technische Hochschule Nürnberg Georg Simon Ohm, Germany
José Mario De Martino, University of Campinas, Brazil
Stefan Bosse, University of Bremen, Dept. of Mathematics & Computer Science, Germany
Herwig Mannert, University of Antwerp, Belgium

# THREE EXPERTS PANELS (II)

#### **SoftNet Experts Panel II**

#### Theme: Health Mobility and Patient-empowering: Smart Solutions for Smart Cities and Living Environments

(urban transportation, health resource discovery, smart living, epidemic forecasting, securing patients data, patient interfaces, health mobile services, patient-oriented devices and services, etc.)



Chair

Lasse Berntzen, University of South-Eastern Norway, Norway

#### **Panelists**

Nitin Agarwal, University of Arkansas at Little Rock, USA

Andrea Corradini, Copenhagen School of Design and Technology, Denmark

Michel A Audette, Old Dominion University, USA

Jesus Zegarra Flores, Capgemini Engineering, France

Hesham Ali, University of Nebraska Omaha, USA

Marko Jäntti, Centre for Measurement and Information Systems, Kajaani University of Applied Sciences, Finland

**Open discussion and Closing remarks** 

**Moderator: Lasse Berntzen** 

# THREE EXPERTS PANELS (III)

#### **SoftNet Experts Panel II**

**Theme: Design and Synthesis of Personalities** 

(synthesis of personalities, adoption of AI digital, conversational user interfaces, observability, ramifications of personalities, emotional intelligence, digital co-workers)

services, etc.)

LIVE

Chair

Jeff Stanley, The MITRE Corporation, USA

#### **Panelists**

Charles Rinker, PRSONAS, Inc., USA
Jennifer Strickland, The MITRE Corporation, USA
Natalie Friedman, Cornell Tech, USA
Corey Miller, The MITRE Corporation, USA & Georgetown University, USA
Sara Beth Elson, The MITRE Corporation, USA
Kelly Horinek, The MITRE Corporation, USA
Open discussion and Closing remarks

**Moderator: Jeff Stanley** 

### FOUR SPECIAL TRACKS

ICSEA 2021/ ESTAMOS: Empirical Studies and Measurement of Software Chair: Prof. Dr. Luigi Lavazza, Dipartimento di Sciente Teoriche e Applicate Università degli

Studi dell'Insubria, Varese, Italy

**CENTRIC 2021/ DSP: Design and Synthesis of Personalities** 

Chair: Jeff Stanley, Lead Human-Centered Engineer at The MITRE Corporation, USA

SIMUL 2021 / HMSIM: Healthcare and Medical Simulation

Chair: Prof. Dr. Michel A. Audette, Old Dominion University - Norfolk, USA

SIMUL 2021 / SIM-SC: Simulation and Modelling in Supply Chains

Chair: Prof. Dr. Frank Herrmann, OTH Regensburg, Germany

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The only operational support comes from registration fees. This generous and ethically fair knowledge sharing model cannot survive a pandemic without true believers in free-access to knowledge and information, which is IARIA's philosophy and vision.

Thanks to all outstanding scientists contributing to SoftNet 2021 program!

For 2021, all events will be held in a hybrid mode with 5 options: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides).

We hope for better times allowing us to return to the traditional on-site scientific events. However, we are ready to adapt to any unexpected circumstances.

Hoping that 2022 will be a more agreeable year!

# Special and Regular Contributions

Despite the ups/downs of the virus, early submissions were more enthusiastic as everyone was hoping that the Spring season 2021 will find us safe, but also virus-free. We wish this were the case and everyone could have attended in person and enjoyed the event.

It is important to say that the help and contributions of all active members, chairs, keynote speakers, tutorial speakers, chairs, authors and members of the respective program committees were outstanding. The result is illustrated by a very rich and instructive program.

We hope you will enjoy it.

Hope never dies!

Hoping for a face-to-face SoftNet 2022 congress October 16-20, 2022 – Lisbon, Portugal

**Be Safe and Stay Healthy!** 

Chairs & Logistics

October 2<sup>nd</sup>, 2021