

IMCL2021

*"New Realities, Mobile Systems and Applications"*

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Mediterranean Palace Hotel\*, Thessaloniki, 4-5 November 2021

*\* IMCL2021 is planned as a hybrid event (remote & onsite presentations will be supported)*

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## Special Session Call for Papers

### Online and Pocket Labs – Hands-on Exercises for Distant Engineering Education (OuPL'21)

#### Overview

Pocket Labs (or Lab in a bag/pocket, Lab at home, etc.) are a very promising opportunity especially for part-time students for managing their study efforts and time. In this context, Pocket Labs are meant to be hardware units (e.g., Digilent's Analog Discovery 1 and 2, National Instruments' myDAQ or myRIO, but also open microcontroller platforms such as Arduino or Raspberry Pi), in combination with software management and programming tools. They enable students to do a reasonable part of their time-consuming work at home and – even more important – at a self-defined time.

Remote or Online Labs have been developed by several universities and offer flexibility in terms of place, time and learning pace. Additionally, they allow students to have access to more complex real experimental setups and offer the possibility for a more efficient sharing of resources across institutions. A well-known example for a Remote Lab is the already widespread VISIR platform, developed by Blekinge Tekniska Högskola (BTH) and used by various Universities in Portugal, Spain, Brazil, Sweden, and Austria.

Online/Remote and Pocket Labs are predestined to be a promising platform for enforcing technology enhanced as well as mobile learning; especially at Universities of Applied Sciences, where practical work is a big issue. They contribute to keeping the entire study program more practice-oriented and potentially increasing student's motivation and satisfaction.

In this special session, we expect to receive proposals of best-practice examples and experiences concerning the use of Pocket and Remote Labs covering a broad variety of hardware and software solutions.

#### Topics

Topics may include, but are not limited to:

- Experiences with the use of Remote, Online and/or Pocket Labs during the COVID-19 pandemic.
- Students' feedback and experiences with Remote, Online and/or Pocket Labs.
- New didactic concepts for engineering education.
- Platforms, methods, and concepts for Online Labs.
- Comparison of results and learning outcomes of classic and remote engineering education.
- Teaching methods, new approaches, covered topics and courses using Remote and/or Pocket Labs as well as possible combinations of both.

#### Contribution Types

Papers for the Special Session should have between 8 and 10 pages.

All submissions will be peer-reviewed by at least two reviewers. Accepted papers will be included in the conference proceedings if at least one author pays the registration fee AND the paper is presented. The conference proceedings will be published as IMCL2021 Proceedings in the Springer series "[Advances in Intelligent Systems and Computing](#)".

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For further questions, please contact the track chair(s).

### **Presentation Types**

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### **Important Dates**

10 Jul 2021      Submission of complete papers for special sessions  
26 Jul 2021      Notification of acceptance  
06 Sep 2021      Camera-ready due & author registration deadline  
04 Nov 2021      IMCL2021 Conference Opening

### **Submission**

Please visit: <https://www.conftool.org/imcl-conference> and submit your paper by selecting the respective special session.

### **Program Committee**

#### **Chair(s)**

Thomas Klinger, CUAS, Austria, [t.klinger@cuas.at](mailto:t.klinger@cuas.at)

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