# Welcome to Day #4 May 9th, 2024

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### Workshop Agenda

8 presentations, Total 20 minutes each

(10-15 min presentation + 10-5 min Q&A)

Students please present at our monthly Show and Tell! Next one is on May 30th, 2024. Coordinator is Jeremy Ellis

# Workshop Agenda

#### **Day Opening**

- 1. Local Feature Alignment for Efficient TinyML Training on Low-Power Devices. Tiago de Souza Farias, Amanda G. Valerio - UFSCar, Brazil
- 2. A Machine Learning-oriented Overview on Tiny Machine Learning: Theory, Methods and Applications Luigi Capogrosso , Franco Fummi, and Marco Cristani - University of Verona, Italy
- 3. Development of an animal tracking system using Tiny Machine Learning kits Jhoel Quispe Alvarado, Nicolás Catalano, Luis H. Arnaldi and Laila Kazimierski, Instituto Balseiro, Universidad Nacional de Cuyo, Argentina

### Workshop Agenda

- 4. Case study: Development of an embedded system for predicting humidity in hydroponic germination of phenolic sponges based on RNN/LSTM (Agronomic Industry). Gustavo P. Castro Abdallah - Universidad Nacional de Rafaela, Argentina
- 5. TinyML: Possibilities, Trends, Prospects, and Challenges in Power Systems Babalola, John Oluwaseun - Bowen University, Nigeria
- 6. TinyML Devices are Vulnerable: A Study of Attack kill chain for TinyML Devices Parin Shah, Yuvaraj Govindarajulu, Pavan Kulkarni and Manojkumar Parmar, AlShield, Bosch Global Software Technology, Bengaluru, India

# Workshop Agenda:

- 7. Development of an algorithm that predicts hand movement in the game rock, paper and scissors with the use of TinyML and Arduino nano BLE Brayan A. Arenas F. Silvia A. Emmanuel David Angarita. Sotelo-Lopez - Universidad Pontificia Bolivariana, Colombia
- 8. Out-of-Distribution Detection in Medical Time-Series Models Jialu Tang Yuan Lu Jungwoo Oh Edward Choi and Aaqib Saeed - Eindhoven University of Technology, The Netherlands KAIST, South Korea Eindhoven Artificial Intelligence Systems Institute

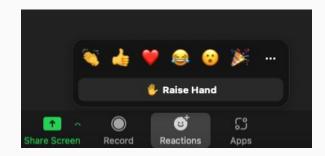
#### **General Discussion**

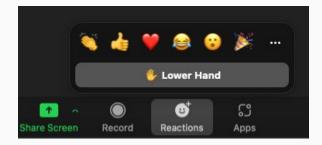
#### Interaction

You are more than welcome to ask questions!

Please raise your hand in Zoom to ask questions.

Unmute, turn on your camera and ask your question. Please lower your hand and mute yourself afterwards.





#### Interaction via Discord

If you have longer questions/ don't want to talk, please use the "ictp-workshop" Discord channel. Questions and answers in Discord will remain after the workshop (--> good reference!).

Please join Discord by following this link: <u>https://discord.gg/zKWgwhSAEY</u> if you haven't already done so!

We will use **Zoom chat only for announcements** or short questions.