



Sustainable and Trustworthy Edge AI for Robotics (STEAR)

Workshop at HiPEAC 2026 (Room S3B • ICE Kraków)
Kraków, Poland, January 28, 2026

10:00 – 10:10	Opening & Welcome
10:10 – 10:30	Networks of Excellence Introduction Short introductions of dAIEDGE (Alain Pagani), euROBIN (Maximilian Durner), ENFIELD (Georgios Spathoulas), and ELIAS (Cecilia)
10:30 – 11:00	Keynote 1: <i>Keynote title to be announced</i> Maximilian Durner (DLR)
11:00 – 11:30	Coffee Break
11:30 – 12:30	Technical Session 1: Efficient, Trustworthy & Regulation-Aware AI <i>Chair: Georgios Kavallieratos</i> 11:30 – 11:50 <i>Hardware-Aware Compression for Low-Power Object Detection on STM32U5 (Charalampos S. Kouzinopoulos)</i> 11:50 – 12:10 <i>Regulation-Aware Continual Learning for Edge Robots (Harshraj Bhoite)</i> 12:10 – 12:30 <i>Ethical Challenges of Wearable AI: A Framework-Oriented Analysis Using the HLEG Trustworthy AI Guidelines (Mihai Maftai)</i>
12:30 – 13:00	Keynote 2: <i>Keynote title to be announced</i> Jean-Marc Bonnefous (TCS)
13:00 – 14:00	Lunch break
14:00 – 15:00	Technical Session 2: Human-Centered, Explainable & Energy-Aware AI <i>Chair: Jose Cano</i> 14:00 – 14:20 <i>Benchmarking the Energy Cost of Assurance in Neuromorphic Edge Robotics (Sylvester Kaczmarek)</i> 14:20 – 14:40 <i>Immersive Teleoperation for Human-Centered Autonomous Driving: A Shared Autonomy Perspective for Edge Robotics (Irene Bouzón)</i> 14:40 – 15:00 <i>UX Principles for Explainable Human-Robot Collaboration (Ame Elliott)</i>
15:00 – 15:30	Keynote 3: <i>The integrity challenge of the AlaaS model</i> Georgios Spathoulas (NTNU)
15:30 – 16:00	Coffee break
16:00 – 16:30	Keynote 4: <i>AI Act and the Cyber Resilience Act: At the Crossroads of Cybersecurity</i> Eyup Kun
16:30 – 17:15	Panel Discussion (Moderator: Alain Pagani) Aligning European Lighthouse Strategies for Sustainable, Trustworthy, and Efficient AI Panelists: <ul style="list-style-type: none"> • Maximilian Durner (DLR) • Georgios Spathoulas (NTNU) • Ovidiu Vermesan (SINTEF) • Jean-Marc Bonnefous (TCS) • Ame Elliott (TBC – Macromedia University)
17:15 – 17:30	Summary & Closing