

Rulebook for the competition:

IMU-based object activity recognition: How accurate is your approach to recognize industrial processes?

Dataset & Resources	<ul style="list-style-type: none"> The organization and providing of data are done via the Pal2Sim website. In addition, platforms such as Zenodo and Kaggle are used. Dataset: Participants will receive access to the dataset, which contains sensor data from industrial warehouse operations at a Rhenus SE & Co. KG facility. The dataset includes IMU sensor data comprising accelerometer, gyroscope, and barometer measurements. Further Information: Video data, annotation, taxonomy, protocols, preliminary work, etc.
Evaluation	<ul style="list-style-type: none"> The data set will be made available predominantly, but a part will be retained for evaluation purposes. Participants train their classifier on the provided data, and the evaluation is performed using the retained data. The source code should be published publicly, e.g. on GitHub. The solution must be presented at CPS-IoT Week. Otherwise, you will be excluded. Evaluation Metric: Matthews Correlation Coefficient (MCC)
Submission Guidelines	<ul style="list-style-type: none"> Participants submit their predictions in a defined format (a blank form for entering the results is provided). Participants are encouraged to share their code after submission. Submissions are sent to a central email address. The submission includes the completed blank form with the predicted activities and a link to the repository.
Timeline	<ul style="list-style-type: none"> Registration start: January 31, 2026 Registration end: February 28, 2026 (EOD) Data provision: March 2, 2026 Q&A session: Two sessions during the competition period and as required by participants Submission: April 30, 2026 (EOD) Competition presentation & results announcement: May 11–14, 2026 (During CPS-IoT Week)
Content during CPS-IoT Week	<ul style="list-style-type: none"> Introduction by the organizers Participants present their approach and results Expected duration: 15–20 minutes per person/team (presentation length depends on the participants) The best result will be awarded a prize Outlook for research by the organizers Closing discussion
Support & Communication	<ul style="list-style-type: none"> Questions can be submitted by email Questions that concern all participants will be answered in two Q&A sessions Important information will be shared with all participants immediately by email
Prize	<ul style="list-style-type: none"> Expected to be cash, vouchers, or merchandise Discussions are currently underway with companies, and we are trying to create the highest possible incentive for participating in the competition.