

DFKI4planet

Competence Center AI for Environment and Sustainability

AI competence for environment and sustainability

DFKI4planet bundles the expert knowledge of different DFKI research departments applying Artificial Intelligence focusing on the preservation of our planet.



Foto: World Bank and Key Consultants Cambodia

DFKI offers AI applications for humans AND for their environment. Sustainable AI key technologies help to develop and advance solutions for global challenges such as climate protection, energy transition and resource conservation. In order to map the enormous potential of DFKI in this field, the Competence Center for "Artificial Intelligence for Environment and Sustainability", in short "DFKI4planet", was established last year. It is headed by Prof. Dr Oliver Zielinski, head of the Marine Perception research department at the DFKI-Laboratory Lower Saxony in Oldenburg.

Within DFKI4planet researcher work together to develop ideas and concepts for the responsible and sustainable use of AI. So far, scientists from Kaiserslautern, Saarbrücken, Berlin, Bremen, Osnabrück and Oldenburg are involved in the still young competence center, across all

Sresearch areas – from Innovative Factory Systems to Speech and Language Technology to Plan-based Robot Control. However, DFKI4planet is not only a platform for expert knowledge, but also serves as a contact point for companies, environmental organizations and interested researchers, as well as a point of contact for politicians, authorities and the public.

Example e-waste: Currently, only one percent of the critical components and valuable rare earth metals contained in electronic equipment, often extracted under difficult conditions, are recycled. How do we get to smart recycling cycles? The film addresses each of these questions and presents solutions.



Six of the DFKI4planet scientists will also discuss the solutions shown in the feature and others in the areas of Industry 4.0, agriculture and forestry, food and textiles as well as language technology in a panel of experts that will be broadcast during the week of the fair on Tuesday, April 13, at 2 p.m. Afterwards, representatives of the industry and other interested parties will have the opportunity to get in touch directly with the experts in a chat to discuss possible solutions for their company.

To give visitors of the Hannover Messe a first impression of its work, DFKI4planet has created an image film that uses three scenarios as examples to illustrate the expertise of the competence center.

Tons of plastic

Example marine plastic waste: Every year, eight million tons of plastic waste end up in the oceans. This corresponds to the weight of about one truckload every 40 seconds. How can hotspots be identified and eliminated?

Example natural disasters: Floods put entire residential areas under water. Droughts and storms leave damaged trees threatening to fall onto railroad tracks and power lines. Are the enormous amounts of freely accessible satellite images and geodata being used efficiently enough?

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