CYbER (CanopY Exploration Robots) project where the science and technology of new multi-modal robots for comprehensive canopy exploration is studied.

ENVIRONMENTAL ROBOTICS

Using robotics to create sustainable agricultural production systems.

Research Areas

- Bioinspired design and fabrication methods for robots;
- Control and perception strategies for robot locomotion and interaction;
- Robotic tools for environmental monitoring;
- Robotics for sustainability.

Regions

Switzerland.

Partners

Institute for Forest, Snow and Landscape Research (WSL); and University of Zurich.

Contact

ETH Zurich
Environmental Robotics Lab
LFW C 55.3
Universitätstrasse 2
8092 Zurich

https://erl.ethz.ch →

Contribution to the WFSC

The research of the Environmental Robotics Lab investigates the challenges and opportunities of robotics in the areas of climate change, environmental degradation, and sustainability. Taking inspiration from nature, we study novel design, manufacturing, perception, and control paradigms to create versatile and robust machines to explore complex and unpredictable natural environments. The purpose of these new robots is threefold: i) to mitigate the effects of climate disasters, ii) to collect data and samples for high spatial and temporal resolution environmental monitoring, iii) to enable efficient and sustainable agricultural production systems.

Prof. Stefano Mintchev