Reliable Deployment of Machine Learning for Long-Term Autonomy

IROS 2020 - Workshop

Organisers

Feras Dayoub, Queensland University of Technology, AU

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Motivation

- Achieving long-term autonomy by mobile robots means the ability to operate autonomously under no/or minimal supervision for days, weeks, months or even years.
- One of the keys to achieving long-term autonomy is having reliable sub-components in the robotic operating system, including the machine learning-based ones.
- The system should identify and recover from failures and prevent or reduce the likelihood of failures in general, which otherwise can terminate the mission of the robot or/and might cause severe danger.

Keynote speakers

- Nick Hawes, University of Oxford, UK
- Michael Milford, Queensland University of Technology (QUT), AU
- Tim Barfoot, University of Toronto, CA
- Zhi Yan, University of Technology of Belfort-Montbéliard (UTBM)
- Ben Upcroft, Oxbotica (Industry)