

Call for papers: Special Issue of the
Journal on Software Engineering for Robotics

on the theme

Software Engineering for Cloud Robotics

Open call for papers following the
International Conference on Cloud and Robotics (ICCR 2017)

November 22-23, 2017, Saint Quentin, France

The domain of cloud robotics aims to converge robots with computation, storage and communication resources provided by the cloud. The cloud may complement robotic resources in several ways, including crowd-sourcing knowledge databases, context information, computational offloading or data-intensive information processing for artificial intelligence. As the challenges in this domain are multi-disciplinary, it requires to build bridges between experts working in different fields, such as robotics, cloud computing, software engineering, software architecture, computationally intensive robotic functions (machine learning, artificial intelligence, big data analytics, *etc.*), networks and distributed systems.

This call for papers welcomes extended versions of papers presented at ICCR 2017 and previous instances of the conference, but also any other submission respecting the theme and the editorial policies of JOSER.

Topics

- Software engineering issues, concepts, tools and practices for cloud robotics and networked robots.
- Architectures and middleware solutions specific to the integration cloud/edge/fog computing with robots.
- Domain Specific Languages for cloud robotics.
- Computational offloading and load balancing in robotics.
- Software engineering issues for developing self-adaptive cloud robotic systems.
- Hands-on experiences and use cases in applying software engineering approaches specific to cloud robotics in all domains: manufacturing, Industry 4.0, healthcare, active assisted living, logistics and transportation, security and surveillance, precision agriculture, *etc.*

Formatting and Submission Instructions

All manuscripts should be prepared according to the JOSER editorial policies and author guidelines available at: <http://www.joser.org>. According to the the JOSER policies, submissions made after publication at ICCR 2017 or any other conferences must be expanded by at least 30% of new scientific and technical material (hence excluding the introduction, the related works and the references *per se*).

Please notify the guest editors (see below) by email before submitting a manuscript.

Important dates

- Submission deadline: March 30, 2018.
- Author notification: June 1, 2018.
- Camera-ready copy: June 30, 2018.
- Issue date: July, 2018 (*tentative*).

Guest editors

- Jacques Malenfant, LIP6, Université Pierre et Marie Curie & CNRS, Jacques.Malenfant-at-lip6.fr.
- Marianne Huchard, LIRMM, Université Montpellier 2 & CNRS.
- Huaxi Yulin Zhang, MIS, Université de Picardie Jules Verne.