

International Workshop on Intelligent Systems and Their Dependability

The International Workshop on Dependable Intelligent Systems (DeIS 2019) seeks to bring together researchers and practitioners to exchange and discuss the most recent dependability techniques and their applications on intelligence systems, for example driverless cars, unmanned aerial vehicle, mobile phone and so on. With the recent tremendous success of artificial intelligence in many software systems and hardware systems, increased researches and efforts are providing to incorporate artificial intelligence into the systems in recent years.

However, the quality assurance of intelligent systems is still at a very early stage. This year's DeIS centers around three key scopes to bring researchers with diverse background (e.g., SRE, AI) to come up with in-depth discussion and solutions for both dependability and intelligent systems: (1) How to define the dependability of intelligent systems, (2) How to increase the dependability of intelligent systems, and (3) How to better test and analyze the dependability of intelligent systems. As we see that artificial intelligence has already significantly contributed to dependability communities. On the other hand, dependability for intelligent systems is still at a very early stage.

DeIS 2019 will, therefore, be a workshop, which seeks to develop a cross-domain community that systematically looks into both areas from the new perspective. The workshop will explore not only how we apply the emerging dependability techniques to intelligent systems, but also the tools for assessing, predicting, and improving the dependability of intelligent systems. We hope DeIS could facilitate to create intelligent systems with high quality, as well as accelerate the process of development and quality assurance with intelligence.

TOPICS

The topics of interest include, but are not limited to, the following:

- Machine learning techniques for dependability techniques;
- Bug analyzing in intelligent systems;
- Fault avoidance techniques in intelligent systems;
- Fault removal techniques in intelligent systems;
- Fault tolerance techniques in intelligent systems;
- Fault prediction techniques in intelligent systems;
- Design of robot intelligent systems;
- Design of mobile intelligent systems;

- Software dependability techniques.

IMPORTANT DATES

Full paper submission: May 29, 2019

Research paper notification: June 15, 2019

Submission of camera-ready copy: June 25, 2019

SUBMISSIONS

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other conferences and journals.

Papers must be written in English and be formatted according to the IEEE authoring guidelines¹. Full papers should not exceed six pages in IEEE style.

ORGANIZING COMMITTEE

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