

※ Special Issue will be published twice in 2018 on different topics. (February and April).

### KSCE J. Civ. Eng.

The KSCE Journal of Civil Engineering is a technical journal published bimonthly by the Korean Society of Civil Engineers (KSCE). The journal publishes original papers within the broad field of civil engineering which include, but are not limited to, the following:

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## 2018 February Special Issue Call for Papers

**Paper Submission Deadline: August 31, 2017**

The *KSCE Journal of Civil Engineering* invites papers for 2018 February Special Issue on a topic related to **Probabilistic learning for decision-making on civil infrastructures under uncertainties**. Special issues are designed to provide a platform and give the opportunity to summarize the state-of-the-art on a specific theme, share new perspectives, and initiate discussion on the latest theoretical research.

This open call invites researchers to submit papers for a Special Issue to be published in **February, 2018**.

### Aim and Scope

#### Probabilistic learning for decision-making on civil infrastructures under uncertainties

Civil infrastructures are subject to risks related to various types of uncertainties in structural deterioration, natural hazards such as earthquakes and winds, and man-made disasters. These uncertainties may change significantly over the life time of the infrastructures, as evidenced in climate change impacts. Therefore, it is crucial to understand the impacts of these uncertainties based on data and information from various sources such as sensors, data repositories and expert opinions. The main purpose of this "probabilistic learning" is to facilitate risk-based optimal decision-making related to planning, monitoring, maintenance and disaster response. Recently, significant research efforts have been made to develop advanced methods for probabilistic learning and optimal decision-making. In conjunction with the fast development of sensor and information technologies, probabilistic learning is expected to transform the way we are understanding and monitoring the risk of civil infrastructures and establish a powerful and adaptive platform for risk-based decision-making.

This special issue aims at identifying the latest methodological advances and transformative application examples in the topic area of probabilistic learning for optimal decision-making on civil infrastructures under uncertain environments. This aim will be achieved by acquiring contributions from eminent researchers in this topic area from academia, laboratories, and industry. These contributions are expected to establish today's technological benchmarks from which the next generation of probabilistic learning in civil engineering will evolve.

### Guest Editor Team for 2018 Special Issue

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- Full papers should be submitted electronically at [www.editorialmanager.com/ksce](http://www.editorialmanager.com/ksce) by August 31, 2017.
- All papers should be submitted under respect of Manuscript Submission Guidelines of KSCE J. Civ. Eng. Please refer to the "Instructions for Authors" of the KSCE Journal of Civil Engineering at the following web link: <http://www.springer.com/12205>
- The article type for 2018 Special Issue submissions should be selected as '2018 SI : Probabilistic learning for decision-making on civil infrastructures under uncertainties'



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