



Journal of Mechanical Design

Special Issue: Data-Driven Design (D³)

With the arrival of cyber-physical systems or internet of things era, the massive human- and machine-generated data will create unprecedented challenges and at the same time unmatched opportunities in advancing the theory, methods, tools and practice of Data-Driven Design (D³) for products, systems and services. By exploiting such huge, versatile and highly contextualized through-life data, design engineers can harness their organization's competitive edge by uncovering patterns, novel insights and knowledge for D³. The aim of this special issue is to bring together original and archival articles that present significant contributions in advancing the D³ field. Examples of D³ topics of interest include (but are not limited to):

- D³ foundation and platform building
- D³ theory and principles
- D³ of engineering decisions
- D³ analytics: algorithm advances
- Big Data-driven Design with online reviews, and with user and system generated data
- Machine learning-based model engineering for D³
- Uncertainty issues in D³
- Analytics of human behaviors for D³
- Big Data-driven Design with social computing, crowdsourcing and human-machine interaction
- Integration of cyber-physical system (IoT, sensor data, etc) for D³
- D³ in prognostics and health management
- D³ in engineering education

Relevance to engineering design will be explicitly considered as a criterion in the review process.

Submission Instructions:

Please submit your paper to ASME at <http://journaltool.asme.org/Content/index.cfm> and note on the cover page that your paper is intended for the special issue on "Data-Driven Design". Please also email the Editor, Dr. Shapour Azarm at editor@asmejmd.org (and cc: assistant@asmejmd.org) to alert them that your paper is intended for the special issue. Information about Journal of Mechanical Design can be found at <http://www.asmejmd.org/>. *Please note that a limit of 12 journal pages without ASME page fees will be observed.*

Publication Target Dates:

Authors submit papers by: February 20, 2017

Initial review completed by: April 10, 2017

Publication of special issue by: November 2017

Papers received after February 20, 2017 may still be considered for the special issue if time and space permit. In certain circumstances, papers that are not ready for production in time for inclusion in the special issue may be considered for a regular issue of the journal.

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