CALL FOR PAPERS

AI EDAM Special Issue, August 2014, Vol. 28, No. 3
Computational Design Synthesis

Guest Editors: Matt Campbell & Kristina Shea

Computational design synthesis is a research area that deals with approaches to design synthesis in product development. The area focuses on automated and semiautomated methods for a range of tasks including synthesis, design generation, search, and optimization. The goals of the research include automatically generating a range of alternatives, sparking creativity and innovation, automating tedious or time-consuming engineering tasks, and exploring the creative abilities of computational systems. Such research is typically ambitious in scope, demanding in developmental and computational resources, and extensive in related work. The work is based on artificial intelligence, mathematical programming, computational geometry, graph theory, engineering design science, and cognitive science.

This Special Issue will showcase the variety and capabilities of what is currently possible for computational system to create. Ideally, results are both human competitive and initiated with few assumptions or limited representations. Submitted papers may relate to specific problem domains or to generic methods or tools to enhance automated synthesis.

Contributions should not be more than 8 pages long in the *AI EDAM* format. A paper with only text that contains 6500 words may fit that maximum; the word count should be adjusted if elements like tables and figures are included.

Authors are invited to submit names of suitable reviewers, such that discussions aimed at developing the paper may be integrated into the review phase.

All submissions will be anonymously reviewed by at least three reviewers. The selection for publication will be made on the basis of these reviews.

Information about the format and style required for *AI EDAM* papers can be found at http://aiedam.usc.edu/

Note that all inquiries and submissions for Special Issues go to the Guest Editors, **not** to the Editor in Chief.

Important Dates

Intent to submit (Title & Abstract):	1 October 2012
Submission deadline for full papers:	1 March 2013
Reviews due:	20 May 2013
Notification and reviews due to authors:	1 June 2013
First revised version submission deadline:	1 September 2013
Notification and reviews due to authors	1 November 2013
Final revised version submission deadline:	1 December 2013

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