

Paper Submission

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

Springer offers authors, editors and reviewers of *Machine Learning* a web-enabled online manuscript submission and review system. Our online system offers authors the ability to track the review process of their manuscript.

Manuscripts should be submitted to: <http://MACH.edmgr.com>. This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats. When submitting please be sure to choose the manuscript type, "Grammatical Inference."

Important Dates

- Paper submission deadline: December 1, 2012
- Notification of acceptance: February 1, 2013
- Final manuscript: June 1, 2013

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Special Issue Call for Papers

Grammatical Inference

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Grammatical inference studies the problem of how a grammar can be reliably and automatically inferred from information about the behavior of the system the grammar characterizes. Generative grammars are used to model a range of behaviors in fields such as including bioinformatics, psychology, linguistics, natural language processing, software engineering, and many other areas.

Research in grammatical inference continually appears in conferences, including the biennial International Conference of Grammatical Inference (ICGI), and journals, and is the subject of a recent book (de la Higuera 2010). The purpose of this special issue is to present the best, cutting-edge research on grammatical inference to the readership of the Machine Learning Journal.

We invite high quality submissions from researchers in all areas of grammatical inference, including, but not limited to, the following areas:

Theoretical aspects of grammatical inference: learning paradigms, learnability results, complexity of learning. Efficient learning algorithms for language classes inside and outside the Chomsky hierarchy. Learning tree and graph grammars. Learning distributions over strings, trees or graphs.

Theoretical and experimental analysis of different approaches to grammar induction, including artificial neural networks, statistical methods, symbolic methods, information-theoretic approaches, minimum description length, complexity-theoretic approaches, heuristic methods, etc.

Novel approaches to grammatical inference: Induction by DNA computing or quantum computing, evolutionary approaches, new representation spaces, etc.

Successful applications of grammatical inference to tasks in natural language processing, bioinformatics, machine translation, pattern recognition, language acquisition, software engineering, computational linguistics, spam and malware detection, cognitive psychology, robotics etc.



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