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# Grammatical Inference: Algorithms and Applications

5th International Colloquium, ICGI 2000 Lisbon, Portugal, September 11-13, 2000 Proceedings



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#### **Preface**

The Fifth International Colloquium on Grammatical Inference (ICGI-2000) was held in Lisbon on September 11–13th, 2000. ICGI-2000 was the fifth in a series of successful biennial international conferences in the area of grammatical inference. Previous conferences were held in Essex, U.K.; Alicante, Spain; Montpellier, France; and Ames, Iowa, USA.

This series of meetings seeks to provide a forum for the presentation and discussion of original research on all aspects of grammatical inference. Grammatical inference, the process of inferring grammar from given data, is a field that is not only challenging from a purely scientific standpoint but also finds many applications in real world problems.

Despite the fact that grammatical inference addresses problems in a relatively narrow area, it uses techniques from many domains, and intersects a number of different disciplines. Researchers in grammatical inference come from fields as diverse as machine learning, theoretical computer science, computational linguistics, pattern recognition and artificial neural networks.

From a practical standpoint, applications in areas such as natural language acquisition, computational biology, structural pattern recognition, information retrieval, text processing and adaptive intelligent agents have either been demonstrated or proposed in the literature.

ICGI-2000 was held jointly with CoNLL-2000, the Computational Natural Language Learning Workshop and LLL-2000, the Second Learning Language in Logic Workshop. The technical program included the presentation of 24 accepted papers (out of 35 submitted) as well as joint sessions with CoNLL and LLL. A tutorial program organized by Gabriel Pereira Lopes took place after the meetings and included tutorials by Raymond Mooney, Gregory Grefenstette, Walter Daelemans, António Ribeiro, Joaquim Ferreira da Silva, Gael Dias, Nuno Marques, Vitor Rossio, João Balsa and Alexandre Agostini. The joint realization of these events represents a unique opportunity for researchers in these related fields to interact and exchange ideas.

I would like to thank Claire Nédellec, Claire Cardie, Walter Daelemans, Colin de la Higuera and Vasant Honavar for their help in several aspects of the organization; the members of the technical program committee and the reviewers for their careful evaluation of the submissions; the members of the local organizing committee, Ana Teresa Freitas and Ana Fred, for their help in setting up the event; and Ana de Jesus for her invaluable secretarial support.

September 2000

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### **Table of Contents**

Inference of Finite-State Transducers by Using Regular Grammars and Morphisms
Computational Complexity of Problems on Probabilistic Grammars and Transducers
Efficient Ambiguity Detection in C-NFA, a Step Towards the Inference of Non Deterministic Automata
Learning Regular Languages Using Non Deterministic Finite Automata 39 François Denis, Aurélien Lemay, and Alain Terlutte
Smoothing Probabilistic Automata: An Error-Correcting Approach 51  Pierre Dupont and Juan-Carlos Amengual
Inferring Subclasses of Contextual Languages
Permutations and Control Sets for Learning Non-regular Language Families 75 Henning Fernau and José M. Sempere
On the Complexity of Consistent Identification of Some Classes of Structure Languages
Computation of Substring Probabilities in Stochastic Grammars
A Comparative Study of Two Algorithms for Automata Identification 115 P. García, A. Cano, and J. Ruiz
The Induction of Temporal Grammatical Rules from Multivariate Time Series
Identification in the Limit with Probability One of Stochastic  Deterministic Finite Automata
Iterated Transductions and Efficient Learning from Positive Data: A Unifying View

#### VIII Table of Contents

An Inverse Limit of Context-Free Grammars - A New Approach to Identifiability in the Limit
Synthesizing Context Free Grammars from Sample Strings Based on Inductive CYK Algorithm
Combination of Estimation Algorithms and Grammatical Inference Techniques to Learn Stochastic Context-Free Grammars
On the Relationship between Models for Learning in Helpful Environments 207 $\it Rajesh~Parekh~and~Vasant~Honavar$
Probabilistic $k$ -Testable Tree Languages
Learning Context-Free Grammars from Partially Structured Examples 229 $Yasubumi\ Sakakibara\ and\ Hidenori\ Muramatsu$
Identification of Tree Translation Rules from Examples
Counting Extensional Differences in BC-Learning
Constructive Learning of Context-Free Languages with a Subpansive Tree . 270 Noriko Sugimoto, Takashi Toyoshima, Shinichi Shimozono, and Kouichi Hirata
A Polynomial Time Learning Algorithm of Simple Deterministic Languages via Membership Queries and a Representative Sample 284 Yasuhiro Tajima and Etsuji Tomita
Improve the Learning of Subsequential Transducers by Using Alignments and Dictionaries
Author Index