Record Nr. UNISA996466054403316 Algorithmic Learning Theory [[electronic resource]]: 4th International **Titolo** Workshop, ALT '93, Tokyo, Japan, November 8-10, 1993. Proceedings / / edited by Klaus P. Jantke, Shigenobu Kobayashi, Etsuji Tomita, Takashi Yokomori Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1993 **ISBN** 3-540-48096-X Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (XI, 428 p.) Lecture Notes in Artificial Intelligence;; 744 Collana Disciplina 006.3 Soggetti Artificial intelligence Mathematics Computers Artificial Intelligence Mathematics, general Theory of Computation Computation by Abstract Devices Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Identifying and using patterns in sequential data -- Learning theory toward Genome Informatics -- Optimal layered learning: A PAC approach to incremental sampling -- Reformulation of explanation by linear logic toward logic for explanation -- Towards efficient inductive synthesis of expressions from input/output examples -- A typed ?calculus for proving-by-example and bottom-up generalization procedure -- Case-based representation and learning of pattern languages -- Inductive resolution -- Generalized unification as background knowledge in learning logic programs -- Inductive inference machines that can refute hypothesis spaces -- On the duality

between mechanistic learners and what it is they learn -- On aggregating teams of learning machines -- Learning with growing quality -- Use of reduction arguments in determining Popperian FIN-type learning capabilities -- Properties of language classes with finite

elasticity -- Uniform characterizations of various kinds of language learning -- How to invent characterizable inference methods for regular languages -- Neural Discriminant Analysis -- A new algorithm for automatic configuration of Hidden Markov Models -- On the VCdimension of depth four threshold circuits and the complexity of Boolean-valued functions -- On the sample complexity of consistent learning with one-sided error -- Complexity of computing Vapnik-Chervonenkis dimension -- ?-approximations of k-label spaces --Exact learning of linear combinations of monotone terms from function value queries -- Thue systems and DNA — A learning algorithm for a subclass -- The VC-dimensions of finite automata with n states --Unifying learning methods by colored digraphs -- A perceptual criterion for visually controlling learning -- Learning strategies using decision lists -- A decomposition based induction model for discovering concept clusters from databases -- Algebraic structure of some learning systems -- Induction of probabilistic rules based on rough set theory.

Sommario/riassunto

This volume contains all the papers that were presented at the Fourth Workshop on Algorithmic Learning Theory, held in Tokyo in November 1993. In addition to 3 invited papers, 29 papers were selected from 47 submitted extended abstracts. The workshop was the fourth in a series of ALT workshops, whose focus is on theories of machine learning and the application of such theories to real-world learning problems. The ALT workshops have been held annually since 1990, sponsored by the Japanese Society for Artificial Intelligence. The volume is organized into parts on inductive logic and inference, inductive inference, approximate learning, query learning, explanation-based learning, and new learning paradigms.