Kluwer Academic Publishers announces a NEW journal for 2000!

GENETIC PROGRAMMING AND EVOLVABLE MACHINES

Wolfgang Banzhaf
Dortmund University, Germany
Editor-in-Chief

The journal of ***Genetic Programming and Evolvable Machines*** is devoted to reporting innovative and significant progress in automatic evolution of software and hardware. Methods for artificial evolution of active components, such as programs or machines are rapidly developing branches of adaptive computation and adaptive engineering. They entail the development, evaluation and application of methods that mirror the process of neo-Darwinian evolution and produce as result computational expressions such as algorithms or machines such as mechanical or electronic devices that actively process environmental information and transform their environment. In addition to its main topics, the journal covers related topics such as evolutionary algorithms with variable-size genomes, alternate methods of program induction, approaches to engineering systems development based on embryology, morphogenesis or other techniques inspired by adaptive natural systems.

Methods:
Genetic Programming; Variable-size evolutionary algorithms; Induction of algorithms and symbolic expressions by iterative and non-deterministic search; Evolutionary design and Optimization of electronic circuits and mechanical devices; On-line adaptation of hardware and software; Evolutionary robotics; DNA computing; Coevolutionary techniques; meta-learning; Hybrid systems; Cellular and Developmental approaches.

Task Domains:
Algorithm evolution; Agents; Architecture; Art and animation; Classification and pattern recognition; Computer graphics; Computing; Circuit design; Data mining; Distributed problem solving; Engineering design applications; Games; Hardware and software testing and verification; Image and signal processing; Interactive evolution; Molecular biology applications; Music; Natural language processing; Network routing; Optimization; Process control; Robotics and motor control; Self-repair; Self-reproduction of software and hardware; Self-programming; System modeling.

Both theoretical papers (preferably including computer simulations) and application papers are welcome. Papers describing hardware implementations are strongly encouraged. Papers in the areas of artificial life, molecular computing and any other emergent computation technique will be considered as well. (All manuscripts are subject to review).

Genetic Programming and Evolvable Machines will be published four times a year with papers selected from all parts of the world. For further information about this new journal, contact: *Scott Delman, Senior Publishing Editor, Kluwer Academic Publishers 101 Philip Drive, Norwell, MA 02061, Tel: 781-871-6600; Fax: 781-871-7507, Email: <scott.delman@wkap.com>*

PROCESS FOR SUBMISSION

Authors should submit **a pdf or postscript file** of their final manuscript to: *karen.cullen@wkap.com*

- The subject heading of the email message MUST read: SUBMISSION for GENP - (all authors' last names).
- The body of the email MUST contain: 1) the manuscript title and all authors'names 2) an abstract, and 3) the contact author's postal, telephone, fax and email address; and 4) the number of pages, tables and figures
- The pdf or postscript file of the manuscript must be sent as an attachment to the email message. ***No updates to this electronic version will be accepted once it arrives at Kluwer for distribution to reviewers.***

Authors who prefer may submit a paper manuscript. Send five copies of the manuscript to:

Ms. Karen Cullen, Journals Editorial Office - GENP, Kluwer Academic Publishers, 101 Philip Drive, Norwell, MA 02061, USA

See Reverse Side for Editorial Board and Order Form

Complete information regarding Kluwer's book and journal publications may be found at <http://www.wkap.nl>

GENETIC PROGRAMMING AND EVOLVABLE MACHINES

ORDERING DETAILS