Electronic Forums and Other EC-Related Activities

The evolutionary computation community maintains a number of electronic mailing lists that provide timely interactions, exchange of information, and sharing of software. Participants submit articles on research issues, recent results, notices on new technical reports, workshop announcements, and calls for papers. A brief description of the more active ones follows.

Comp.AI.Genetic is a newsgroup intended for anyone interested in the general area of evolutionary computation. See your local systems administrator to obtain this news feed. A substantial FAQ sheet (frequently asked questions) on EC is maintained and is quite helpful.

EP-List is an electronic mailing focusing on Evolutionary Programming (EP) as defined by Fogel. To subscribe, send mail to EP-List-Request@magenta.me.fau.edu.

Genetic-Programming is an electronic mailing list focusing on genetic programming (GP) as defined by Koza. To subscribe, send mail to Genetic-Programming-Request@cs.stanford.edu.

GA-List is a moderated electronic digest for the interchange of information relating to genetic algorithms (GAs) as defined by Holland and general issues of evolutionary computation. Submissions are put into digest form and sent to subscribers approximately once a week. To subscribe, send mail to GA-List-Request@aic.nrl.navy.mil.

An ftp archive site is maintained with back issues of GA-List and other useful information, including source code for genetic algorithm and other evolutionary algorithm packages. The ftp site can be accessed using anonymous ftp to ftp.aic.nrl.navy.mil. Use a username of "anonymous" and use your own e-mail address as your password.

In addition to the ftp site, the archive is now available on the World Wide Web. This also contains links to other GA and evolutionary computation information sources and links to the home pages of other research groups working in evolutionary computation. The URL is http://www.aic.nrl.navy.mil/galist.

The GA-List digest also includes a calendar of recent and upcoming EC-related events. The following listing of events is excerpted from a recent issue of GA-List. The volume/number designation refers to the GA-List issue where the full announcement can be found.

27 February – 1 March, 1998

13th Annual ACM Symposium on Applied Computing (SAC98) Genetic Algorithms and Optimization Track
Atlanta Marriot Marquis, Atlanta, Georgia, U.S.A. (v11n17)

Applications using genetic algorithms, genetic programming, and other optimization techniques are one of the major tracks in SAC'98. This particular track has had enormous success in past years, and we anticipate another set of excellent papers for this conference.

The purpose of this track is to provide a forum for the interchange of ideas, research, development activities, and applications among academicians and practitioners in the areas related to genetic algorithms and other optimization techniques in applications.

Contact:

Roger L. Wainwright

Track Editor SAC'98

Genetic Algorithms

Department of Mathematical and Computer Sciences

University of Tulsa

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rogerw@penguin.mcs.utulsa.edu

http://www.acm.org/conferences/SAC98/

Important Dates:

Aug 15, 1997:   Paper submission
Oct 15, 1997:   Author notification
Dec 1, 1997:   Camera-ready copy due
Feb 27, 1998:   Conference begins

25 – 27 March, 1998

EP98 The Seventh Annual Conference on Evolutionary Programming, Mission Valley Marriott, San Diego, CA, USA (v11n18)

The Seventh Annual Conference on Evolutionary Programming will serve as a forum for researchers investigating applications and theory of evolutionary programming and other related areas in evolutionary and natural computation. Authors are invited to submit papers that describe original, unpublished research in evolutionary programming, evolution strategies, genetic algorithms, genetic programming, artificial life, cultural algorithms, and other models that rely on evolutionary principles. Specific topics include, but are not limited to, the use of evolutionary simulations in optimization, neural network and filter design, automatic control, image processing, and computer graphics. Other topics of interest include mathematical theory or empirical analysis providing insight into the behavior of evolutionary algorithms. Of particular interest are applications of simulated evolution to problems in biology and operations research.

Submission Date: October 1, 1997

Contact:

N. Saravanan

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Madison Heights, MI 48071

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nsaravan@pobox.com

http://www.natural-selection.com/eps/ep98.html

14 – 15 April, 1998

First European Workshop on Genetic

Programming (EUROGP'98), Paris, France (v11n33)

Genetic Programming (GP) is a new branch of evolutionary computation in which the structures in the population being evolved are not fixed-length strings of parameters that encode possible solutions to a problem, but *programs* that, when executed, *are* the candidate solutions to the problem.

GP has been applied successfully to a large number of difficult problems like automatic design, pattern recognition, robotic control, synthesis of neural networks, symbolic regression, and music and picture generation.

EUROGP'98 is the first event entirely devoted to genetic programming to be held in Europe. The aims are to give European and non-European researchers in the area of genetic programming as well as people from industry an opportunity to present their latest research and discuss current developments and applications. The event will be held on the Tuesday and Wednesday of the week after Easter, in the center of Paris, Quartier Latin, a 5-minute walking distance from Notre-Dame.

Timetable:

Submission deadline: Dec 1, 1997
Notification of acceptance: Jan 10, 1998
Camera-ready papers
  for workshop: Jan 31, 1998
Workshop: Apr 14–15, 1998

http://www.cs.bham.ac.uk/rmp/eebic/EuroGP98.html

15 – 17 April, 1998

Second Pacific–Asia Conference on Knowledge Discovery and Data Mining, Melbourne, Australia (PAKDD-98) (v11n33)

The Second Pacific–Asia Conference on Knowledge Discovery and Data Mining (PAKDD-98) will provide an international forum for the sharing of original research results and practical development experiences among researchers and application developers from different KDD-related areas, such as machine learning, databases, statistics, knowledge acquisition, data visualization, software reengineering, and knowledge-based systems. It will follow the success of *PAKDD-97 held in*

Singapore in 1997 by bringing together participants from universities, industry, and government.

Important dates:

4 copies of full
  papers received by: Oct 16, 1997
Acceptance notices: Dec 22, 1997
Final camera-readies
  due by: Jan 30, 1998

http://www.sd.monash.edu.au/pakdd-98

16 – 17 April, 1998

EVOROBOT'98: First European Workshop on Evolutionary Robotics, Paris, France (v11n34)

Evolutionary robotics (ER) is a new field of research that is concerned with the use of evolutionary computing techniques for the automatic design of adaptive robots. The aims of this workshop, which will bring together active ER researchers and people from industry, are to assess the current state of the art and to provide opportunities for fostering future developments and applications.

Submission instructions:

Electronic submissions via ftp are strongly encouraged (see our web page for full submission instructions). For submissions in traditional paper format, send two hard-copies to each of the Program Chairs, Philip Husbands and Jean-Arcady Meyer. All submissions must arrive no later than 1 December 1997. Notifications of acceptance or rejection will be sent by e-mail on 10 January 1998 at the latest. Camera-ready versions of the papers will be required by 31 January 1998.

http://www.cogs.susx.ac.uk/evorob

21 – 23 April, 1998

Evolutionary/Adaptive Computing Conference (formerly Adaptive Computing in Engineering Design and Control, ACEDC) (v11n3)

i) explore the integration of adaptive computing (AC) technologies and complementary soft computing techniques across a wider spectrum

of design activities.

ii) include AC integration with manufacturing systems i.e., control, planning and scheduling etc.

iii) address the inclusion of manufacturing aspects and criteria within AC-based design scenarios ie the utility of AC within integrated product development.

iv) explore the human-centered aspects of AC integration with current design / manufacturing team practice.

http://www.tech.plym.ac.uk/soc/research/edc

4 – 9 May, 1998

1998 IEEE International Conference on Evolutionary Computation (ICEC) (part of the IEEE Neural Networks Council World Congress on Computational Intelligence) (v11n22)

Papers for the conference should be submitted on or before September 26, 1997, to me at the address below (i.e., they should be received by this date). The technical program chairs who will be responsible for handling the reviews and the formation of the final technical program are Thomas Bäck, Hans-Paul Schwefel, and Xin Yao. Papers should present original, unpublished efforts in evolutionary computation and are limited to six (6) pages.

Contact:

David B. Fogel

Program Chair, ICEC98

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www.natural-selection.com/people/dbf.html

http://www.arc.unm.edu/wcci-98

10 – 14 May, 1998

Learning Cyclic Control/Behavior in Robots at ISORA'98 (Seventh International Symposium on Robotics with Applications: part of the World Automation Congress (WAC 98)) (v11n8)

A special session is planned on learning cyclic control/behavior in robots. Facets of robot control require that a sequence of instructions be continually repeated to attain the desired behavior. The purpose of this session will be to examine alternative means of learning these cycles and their applications. Learning methods can be (but are not limited to):

Genetic algorithms

Cyclic genetic algorithms

Genetic programming

Evolutionary strategies

Classifier systems

Evolutionary programming

Neural networks

Fuzzy logic

Probabilistic reasoning

Important Dates:

Apr 15, 1997:	Abstract due
June 15, 1997:	Notification of acceptance
Sept 1, 1997:	Full manuscript due date
May 10–14, 1998:	ISORA'98

Session Chair:

Gary B. Parker

Lindley Hall 215

Computer Science Department

Indiana University

Bloomington, IN 47405-4101 USA

gaparker@cs.indiana.edu

17 – 20 May, 1998

Eleventh Annual FLAIRS Conference, Sanibel Island, Florida (v11n34)

The Eleventh International FLAIRS conference seeks high-quality paper submissions in all areas of artificial intelligence (AI), including planning, learning, uncertainty reasoning, computer vision, expert systems, multiagent systems, logic, knowledge representation, and AI education. All accepted papers will appear in the conference proceedings, and selected authors will be invited to submit a full paper to a special issue of the *International Journal of Pattern Recognition and Artificial Intelligence*.

Abstracts must be received by October 20, 1997.

Abstracts received after this date will not be considered. Notification of acceptance will be mailed by December 15, 1996. Authors of accepted papers will be expected to submit the final camera-ready copy of their full papers by February 23, 1998. Final papers will consist of at most 5 galley pages (approximately 10 double-spaced pages).

http://www-cse.uta.edu/ cook/flairs98.html

22 – 24 July, 1998

Theoretical Aspects of Rationality and Knowledge (TARK), Evanston, IL (v11n33)

The mission of the biannual TARK conferences is to bring together researchers from a wide variety of fields, including artificial intelligence, cryptography, distributed computing, economics and game theory, linguistics, philosophy, and psychology, in order to further our rationality and resource-bounded reasoning, commonsense epistemic reasoning, epistemic logic, knowledge and action, applications of reasoning about knowledge and other mental states, and belief revision. TARK VII will be coordinated with the 1998 Microeconomic Theory Workshop at Northwestern University, sharing talks for about a day and a half, on topics that are of interest to both audiences. Previously a by-invitation-only conference, TARK is now open to all interested attendees.

The deadline for submission of abstracts is March 4, 1998. Authors will be notified of acceptance by May 1, 1998. Camera-ready copies of the accepted papers will be due by June 3, 1998. One author of each accepted paper will be expected to present the paper at the conference. The conference proceedings will be published.

http://www.tark.org

22 – 25 July, 1998

Third Annual Genetic Programming Conference (GP-98), University of Wisconsin, Madison, Wisconsin (v11n23)

Genetic programming is an automatic programming technique for evolving computer programs that solve (or approximately solve) problems. Over 800 technical papers have been

published since 1992 in this rapidly growing field. GP-98 will be held in cooperation with the American Association for Artificial Intelligence (AAAI) (and other organizations to be announced).

Submission deadline: January 21, 1998

Administrative Contact:

GP-98 Conference

c/o American Association for

Artificial Intelligence

445 Burgess Drive

Menlo Park, CA 94025

Phone: 415-328-3123

FAX: 415-321-4457

e-mail: gp@aaai.org

Technical Contact:

John Koza, GP-98 Chair

Computer Science Department

Stanford University

Stanford, CA

koza@cs.stanford.edu.

http://www.genetic-programming.org

24 – 26 August, 1998

This is the third international conference on hydroinformatics organized by the International Association for Hydraulic Research (IAHR) and is hosted on this occasion by the Danish Hydraulic Institute (v11n13).

The objectives of this conference are to expose the latest developments in hydroinformatics as well as to present the state-of-the-art applications of this technology to real-world problems.

Conference topics encompass, but are not restricted to:

Emergent technologies (evolutionary algorithms, neural networks, fuzzy logic, distributed and decentralized simulation, object- and agent-orientation, data mining)

Correspondence:

Hydroinformatics '98

Danish Hydraulic Institute

Agern All=E9 5, DK-2970 H=F8rsholm

Denmark

Tel: +45 - 45 76 95 55

Fax: +45 - 45 76 25 67

HIC98@dhi.dk

http://www.dhi.dk/HIC98/Welcome.html

Important dates and deadlines:

Sept 15, 1997: Submission of abstracts
Oct 15, 1997:   Acceptance of abstracts
Feb 1, 1998:   Submission of papers
Aug 23, 1998:   Tutorial day and welcoming
                of delegates
Aug 24, 1998:   Conference

http://www.dhi.dk/HIC98/Welcome.html

23 – 28 August, 1998

European Conference on Artificial Intelligence (ECAI-98), Brighton, UK (v11n31)

The ECAI-98 Programme Committee invites submission of papers for the Technical Programme of the 13th biennial European Conference on Artificial Intelligence (ECAI-98).

Submissions are invited on substantial, original, and previously unpublished research in all aspects of artificial intelligence (AI), including, but not limited to: abduction, temporal, causal reasoning, and diagnosis; automated reasoning; application and enabling technologies; belief revision and nonmonotonic reasoning; case-based reasoning; cognitive modeling and philosophical foundations; computational linguistics; constraint-based reasoning and constraint programming; distributed AI and multiagent systems; fuzzy logic; knowledge acquisition; knowledge representation; logic programming and theorem proving; machine learning, knowledge discovery, and data mining; natural language and intelligent user interfaces; neural networks in AI; planning, scheduling, and reasoning about actions; probabilistic networks; qualitative preferences and decision in AI; qualitative and spatial reasoning; reasoning under uncertainty; robotics, vision, and signal understanding; search and meta-heuristics for AI; and verification, validation and testing of knowledge-based systems.

Important dates:

23 Jan 1998:	Deadline for papers
15 Apr 1998:	Notification of acceptance
15 May 1998:	Camera-ready copies of papers
26–28 Aug 1998:	Technical programme at ECAI-98

http://www.cogs.susx.ac.uk/call.html

24 – 26 September, 1998

Second International Conference on Evolvable Systems: From Biology to Hardware (ICES98) (v11n11)

Following the success of these past events, ICES98 will reunite this burgeoning community, presenting the latest developments in the field, bringing together researchers who use biologically inspired concepts to implement real systems in artificial intelligence, artificial life, robotics, VLSI design, and related domains.

Important Dates:

March 1998:	Submission deadline
May 1998:	Notification of acceptance
June 1998:	Camera-ready due
September 24–26 1998:	Conference dates

http://lslwww.epfl.ch/ices98/

24 – 26 September, 1998

Foundations of Genetic Algorithms 5 (FOGA5): A Workshop on Theoretical Aspects of Evolutionary Computation Amsterdam, The Netherlands

The 1998 Foundations of Genetic Algorithms (FOGA5) workshop will be the fifth biennial meeting of a workshop that was originally conceived as a way of exploring and focusing on theoretical issues relating to genetic algorithms (GAs), evolution strategies, and the field of evolutionary computation in general.

FOGA5 will be held near Amsterdam on September 24–26, 1998. Attendance at the workshop will be limited, since the goal is, as with previous meetings of FOGA, to create a small forum with close interaction between the participants.

Important dates:

13 March 1998:	Extended abstract due
1 June 1998:	Authors notified of acceptance
17 July 1998:	Drafts of full paper due

For more information, the full description of the call for papers can be obtained at the following website:

http://www.aic.nrl.navy.mil/galist/info /conferences/CONFERENCES.html

27 September – 1 October, 1998

Parallel Problem Solving from Nature, Amsterdam (v11n16)

Natural computation is a common name for the understanding and design of algorithms gleaned from nature. The main characteristic of natural computation is the metaphorical use of concepts, principles, and mechanisms underlying natural systems. Examples are: evolutionary algorithms inspired by the processes of genetic inheritance and natural selection in biology, simulated annealing inspired by many-particle systems in physics, algorithms inspired by growth processes in biology and economics, and neural and immune networks inspired by multicellular systems in biology and chemistry.

Important Dates:

March 13, 1998:	Submission of full papers
June 1, 1998:	Notification of acceptance
July 1, 1998:	Submission of revised accepted papers

http://www.wi.leidenuniv.nl/CS/ALP /ppsn98.html