An Indexed Bibliography of Genetic Algorithms and Neural Networks

compiled by

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dedicated to Teuvo Kohonen

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DRAFT May 17, 2001

available via anonymous ftp: site `ftp.uwasa.fi` directory `cs/report94-1` file `gaNNbib.ps.Z`

Trademarks

Warning

While this bibliography has been compiled with the utmost care, the editor takes no responsibility for any errors, missing information, the contents or quality of the references, nor for the usefulness and/or the consequences of their application. The fact that a reference is included in this publication does not imply a recommendation. The use of any of the methods in the references is entirely at the user's own responsibility. Especially the above warning applies to those references that are marked by trailing '†' (or '*'), which are the ones that the editor has unfortunately not had the opportunity to read. An abstract was available of the references marked with '*'.

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Chapter 1

Preface

> " Living organism are consummate problem solvers. They exhibit a versatility that puts the best computer programs to shame. "
>
> *John H. Holland,* [1]

The material of this bibliography has been extracted from the genetic algorithm bibliography [2], which when this report was compiled (May 17, 2001) contained 13735 items and which has been collected from several sources of genetic algorithm literature including Usenet newsgroup `comp.ai.genetic` and the bibliographies [3, 4, 5, 6]. The following index periodicals have been used systematically

- A: *International Aerospace Abstracts:* Jan. 1995 – Sep. 1998
- ACM: *ACM Guide to Computing Literature:* 1979 – 1993/4
- BA: *Biological Abstracts:* July 1996 - Aug. 1998
- CA: *Computer Abstracts:* Jan. 1993 – Feb. 1995
- CCA: *Computer & Control Abstracts:* Jan. 1992 – Dec. 1999 (except May -95)
- ChA: *Chemical Abstracts:* Jan. 1997 - Dec. 1999
- CTI: *Current Technology Index* Jan./Feb. 1993 – Jan./Feb. 1994
- DAI: *Dissertation Abstracts International:* Vol. 53 No. 1 – Vol. 56 No. 10 (Apr. 1996)
- EEA: *Electrical & Electronics Abstracts:* Jan. 1991 – Apr. 1998
- EI A: *The Engineering Index Annual:* 1987 – 1992
- EI M: *The Engineering Index Monthly:* Jan. 1993 – Apr. 1998 (except May 1997)
- N: *Scientific and Technical Aerospace Reports:* Jan. 1993 - Dec. 1995 (except Oct. 1995)
- P: *Index to Scientific & Technical Proceedings:* Jan. 1986 – Dec 1999 (except Nov. 1994)
- PA: *Physics Abstracts:* Jan. 1997 – June 1999
- PubMed: *National Library of Medicine* Jan. 2000 – Oct. 2000

1.1 Your contributions erroneous or missing?

The bibliography database is updated on a regular basis and certainly contains many errors and inconsistences. The editor would be glad to hear from any reader who notices any errors, missing information, articles etc. In the future a more complete version of this bibliography will be prepared for the genetic algorithms and neural networks research community and others who are interested in this rapidly growing area of genetic algorithms.

When submitting updates to the database, paper copies of already published contributions are preferred. Paper copies (or `ftp` ones) are needed mainly for indexing. We are also doing reviews of different aspects and applications of GAs where we need as complete as possible collection of GA papers. Please, do not forget to include complete bibliographical information: copy also proceedings volume title pages, journal table of contents pages, etc. Observe that there exists several versions of each subbibliography, therefore **the reference numbers are not unique and should not be used alone in communication**, use the `key` appearing as the last item of the reference entry instead.

Complete bibliographical information is really helpful for those who want to find your contribution in their libraries. If your paper was worth writing and publishing it is certainly worth to be referenced right in a bibliographical database read daily by GA researchers, both newcomers and established ones.

For further instructions and information see `ftp.uwasa.fi/cs/GAbib/README`.

1.1.1 How to cite this report?

The complete BiBTEX record for this report is shown below:

```
@TECHREPORT{gaNNbib,
     KEY = "NN",
     ANNOTE = "*on,*FIN,bibliography /special",
     AUTHOR = "Jarmo T. Alander",
     TITLE = "Indexed Bibliography of Genetic Algorithms and Neural{\BL}Networks",
     INSTITUTION = "University of Vaasa, Department of Information Technology and Production Economics",
     TYPE = "Report",
     NUMBER = "94-1-NN",
     NOTE = "(\ftp{ftp.uwasa.fi}{cs/report94-1}{gaNNbib.ps.Z})",
     YEAR = 1995
}
```

You can also use the BiBTEX file `GASUB.bib`, which is available in our ftp site `ftp.uwasa.fi` in directory `cs/report94-1` and contains records for all GA subbibliographies.

1.2 How to get this report via Internet?

Versions of this bibliography are available via anonymous `ftp` and `www` from the following sites:

media	*country*	*site*	*directory*	*file*
ftp	Finland	ftp.uwasa.fi	/cs/report94-1	gaNNbib.ps.Z
www	Finland	http://www.cs.hut.fi	~ ja/gaNNbib	gaNNbib.html

Observe that these versions may be somewhat different and perhaps reduced as compared to this volume that you are now reading. Due to technical problems in transforming LATEXdocuments into `html` ones the `www` versions contain usually less information than the corresponding `ftp` ones. It is also possible that the `www` version is completely unreachable.

The directory also contains some other indexed GA bibliographies shown in table 1.1. In case you do not find a proper one please let us know: it may be easy to tailor a new one.

1.3 Acknowledgement

The editor wants to acknowledge all who have kindly supplied references, papers and other information on genetic algorithms and neural networks literature. At least the following GA researchers have

file	*contents*
`ga90bib.ps.Z`	GA in 1990
`ga91bib.ps.Z`	GA in 1991
`ga92bib.ps.Z`	GA in 1992
`ga93bib.ps.Z`	GA in 1993
`ga94bib.ps.Z`	GA in 1994
`ga95bib.ps.Z`	GA in 1995
`ga96bib.ps.Z`	GA in 1996
`ga97bib.ps.Z`	GA in 1997
`ga98bib.ps.Z`	GA in 1998
`gaAIbib.ps.Z`	GA in artificial intelligence
`gaALIFEbib.ps.Z`	GA in artificial life
`gaARTbib.ps.Z`	GA in art and music
`gaAUSbib.ps.Z`	GA in Australia
`gaBASICSbib.ps.Z`	Basics of GA
`gaBIObib.ps.Z`	GA in biosciences including medicine
`gaCADbib.ps.Z`	GA in Computer Aided Design
`gaCHEMPHYSbib.ps.Z`	GA in chemistry and physics
`gaCONTROLbib.ps.Z`	GA in control
`gaCSbib.ps.Z`	GA in computer science (incl. databases and GP)
`gaDBbib.ps.Z`	GA in databases
`gaECObib.ps.Z`	GA in economics and finance
`gaENGbib.ps.Z`	GA in engineering
`gaESbib.ps.Z`	Evolution strategies
`gaFAR-EASTbib.ps.Z`	GA in the Far East (Japan etc)
`gaFRAbib.ps.Z`	GA in France
`gaFTPbib.ps.Z`	GA papers available via ftp
`gaFUZZYbib.ps.Z`	GA and fuzzy logic
`gaGERbib.ps.Z`	GA in Germany
`gaGPbib.ps.Z`	genetic programming
`gaIMPLEbib.ps.Z`	implementations of GA
`gaISbib.ps.Z`	immune systems
`gaJOURNALbib.ps.Z`	journal articles
`gaJAPANbib.ps.Z`	GA in Japan
`gaLATINbib.ps.Z`	GA in Latin America, Portugal & Spain
`gaLOGISTICSbib.ps.Z`	GA in logistics
`gaMANUbib.ps.Z`	GA in manufacturing
`gaMEDITERbib.ps.Z`	GA in the Mediterranean
`gaNNbib.ps.Z`	GA in neural networks
`gaNORDICbib.ps.Z`	GA in Nordic countries
`gaOPTIMIbib.ps.Z`	GA and optimization (only a few refs)
`gaOPTICSbib.ps.Z`	GA in optics and image processing
`gaORbib.ps.Z`	GA in operations research
`gaPARAbib.ps.Z`	Parallel and distributed GA
`gaPOWERbib.ps.Z`	GA in power engineering
`gaPROTEINbib.ps.Z`	GA in protein research
`gaROBOTbib.ps.Z`	GA in robotics
`gaSAbib.ps.Z`	GA and simulated annealing
`gaSIGNALbib.ps.Z`	GA in signal and image processing
`gaTHEORYbib.ps.Z`	Theory and analysis of GA
`gaTHESESbib.ps.Z`	PhD etc theses
`gaTOP10bib.ps.Z`	Authors having at least 10 GA papers
`gaUKbib.ps.Z`	GA in United Kingdom
`gaVLSIbib.ps.Z`	GA in VLSI design and testing

Table 1.1: Indexed GA subbibliographies in directory `ftp.uwasa.fi/cs/report94-1`.

already kindly supplied their complete autobibliographies and/or proofread references to their papers: Dan Adler, Patrick Argos, Jarmo T. Alander, James E. Baker, Wolfgang Banzhaf, Helio J. C. Barbosa, Hans-Georg Beyer, Christian Bierwirth, Joachim Born, Ralf Bruns, I. L. Bukatova, Thomas Bäck, David E. Clark, Carlos A. Coello Coello, Yuval Davidor, Dipankar Dasgupta, Marco Dorigo, J. Wayland Eheart, Bogdan Filipič, Terence C. Fogarty, David B. Fogel, Toshio Fukuda, Hugo de Garis, Robert C. Glen, David E. Goldberg, Martina Gorges-Schleuter, Hitoshi Hemmi, Vasant Honavar, Jeffrey Horn, Aristides T. Hatjimihail, Mark J. Jakiela, Richard S. Judson, Bryant A. Julstrom, Charles L. Karr, Akihiko Konagaya, Aaron Konstam, John R. Koza, Kristinn Kristinsson, Malay K. Kundu, D. P. Kwok, Gregory Levitin, Carlos B. Lucasius, Michael de la Maza, John R. McDonnell, J. J. Merelo, Laurence D. Merkle, Zbigniew Michalewics, Melanie Mitchell, David J. Nettleton, Volker Nissen, Ari Nissinen, Tomasz Ostrowski, Kihong Park, Nicholas J. Radcliffe, Colin R. Reeves, Gordon Roberts, David Rogers, Ivan Santibáñez-Koref, Marc Schoenauer, Markus Schwehm, Hans-Paul Schwefel, Michael T. Semertzidis, Davil L. Shealy, Moshe Sipper, William M. Spears, Donald S. Szarkowicz, El-Ghazali Talbi, Masahiro Tanaka, Leigh Tesfatsion, Peter M. Todd, Marco Tomassini, Andrew L. Tuson, Kanji Ueda, Jari Vaario, Gilles Venturini, Hans-Michael Voigt, Roger L. Wainwright, D. Eric Walters, James F. Whidborne, Steward W. Wilson, Xin Yao, and Xiaodong Yin.

The editor also wants to acknowledge Elizabeth Heap-Talvela for her kind proofreading of the manuscript of this bibliography.

Chapter 2

Introduction

> "Many scientist, possibly most scientist, just do science without thinking too much about it. They run experiments, make observations, show how certain data conflict with more general views, set out theories, and so on. Periodically, however, some of us—scientists included—step back and look at what is going on in science."
>
> *David L., Hull,* [7]

The table 2.1 gives the queries that have been used to extract this bibliography. The query system as well as the indexing tools used to compile this report from the BiBTeX-database [8] have been implemented by the author mainly as sets of simple `awk` and `gawk` programs [9, 10].

string	*field*	*class*
`neural net`	`ANNOTE`	Neural networks

Table 2.1: Queries used to extract this subbibliography from the source database.

Chapter 3

Statistical summaries

This chapter gives some general statistical summaries of genetic algorithms and neural networks literature. More detailed indexes can be found in the next chapter.

References to each class (c.f table 2.1) are listed below:

- **Neural networks** 1234 references ([11]-[1244])

Observe that each reference is included (by the computer) only to one of the above classes (see the queries for classification in table 2.1; the textual order in the query gives priority for classes).

3.1 Publication type

This bibliography contains published contributions including reports and patents. All unpublished manuscripts have been omitted unless accepted for publication. In addition theses, PhD, MSc etc., are also included whether or not published somewhere.

Table 3.1 gives the distribution of publication type of the whole bibliography. Observe that the number of journal articles may also include articles published or to be published in unknown forums.

type	*number of items*
book	7
section of a book	8
part of a collection	32
journal article	338
proceedings article	758
proceedings	5
report	54
PhD thesis	19
MSc thesis	12
others	1
total	1234

Table 3.1: Distribution of publication type.

3.2 Annual distribution

Table 3.2 gives the number of genetic algorithms and neural networks papers published annually. The annual distribution is also shown in fig. 3.1. The average annual growth of GA papers has been approximately 40 % during almost the last twenty years.

year	*items*	*year*	*items*
1987	6	1988	9
1989	19	1990	60
1991	58	1992	107
1993	145	1994	130
1995	178	1996	165
1997	201	1998	111
1999	34	2000	8
2001	3		
total			1234

Table 3.2: Annual distribution of contributions.

3.3 Classification

Every bibliography item has been given at least one describing keyword or classification by the editor of this bibliography. Keywords occurring most are shown in table 3.3.

neural networks	1089
hybrid	82
engineering	82
control	63
image processing	41
robotics	32
machine learning	28
comparison	27
parallel GA	26
pattern recognition	23
signal processing	22
controllers	20
economics	18
genetic programming	17
implementation	16
medicine	15
neural network	14
fuzzy systems	14
evolution strategies	12
classifiers	12
optimization	11
time series	10
scheduling	10
review	10
others	2251

Table 3.3: The most popular subjects.

3.4 Authors

Table 3.4 gives the most productive authors.

total number of authors	1888
Cliff, David T.	22
Garis, Hugo de	22
Harvey, Inman	21
Husbands, Philip	20
Fogel, David B.	19
Whitley, Darrell	19
Fukuda, Toshio	18
Yao, Xin	12
Shibata, Takanori	10
3 authors	9
5 authors	8
3 authors	7
10 authors	6
18 authors	5
35 authors	4
73 authors	3
243 authors	2
1489 authors	1

Table 3.4: The most productive genetic algorithms and neural networks authors.

3.5 Geographical distribution

The following table gives the geographical distribution of authors, when the country of the author was known. Over 80% of the references of the source database are classified by country.

country	*abs*	*%*
Total	1103	100.00
United States	286	25.93
Japan	151	13.69
United Kingdom	127	11.51
Germany (incl. DDR)	84	7.62
China (incl. Hong Kong)	46	4.17
Italy	36	3.26
South Korea	36	3.26
France	30	2.72
Australia	29	2.63
Finland	29	2.63
Taiwan R.o.C.	23	2.09
Spain	22	1.99
Belgium	21	1.90
India	18	1.63
Poland	17	1.54
The Netherlands	17	1.54
Canada	14	1.27
Brazil	13	1.18
Czech Republic	12	1.09
Singapore	9	0.82
Russia	8	0.73
Denmark	7	0.63
Greece	6	0.54
Slovenia	5	0.45
Switzerland	5	0.45
Turkey	5	0.45
Austria	4	0.36
Egypt	4	0.36
Israel	4	0.36
Romania	4	0.36
Ukraina	4	0.36
Argentina	3	0.27
Bulgaria	3	0.27
Hungary	3	0.27
New Zealand	3	0.27
Portugal	3	0.27
Cyprus	2	0.18
Jordan	2	0.18
Sweden	2	0.18
United Arab Emirates	2	0.18
Venezuela	2	0.18
Yugoslavia	2	0.18
Azerbaithzan	1	0.09
Byelorussia	1	0.09
Chile	1	0.09
Iceland	1	0.09
Ireland	1	0.09
Norway	1	0.09
Republic of South Africa	1	0.09
Thailand	1	0.09

Table 3.5: The geographical distribution of the authors. Observe that joint papers may have authors from several countries. This decreases the unknown country count (= all - known countries).

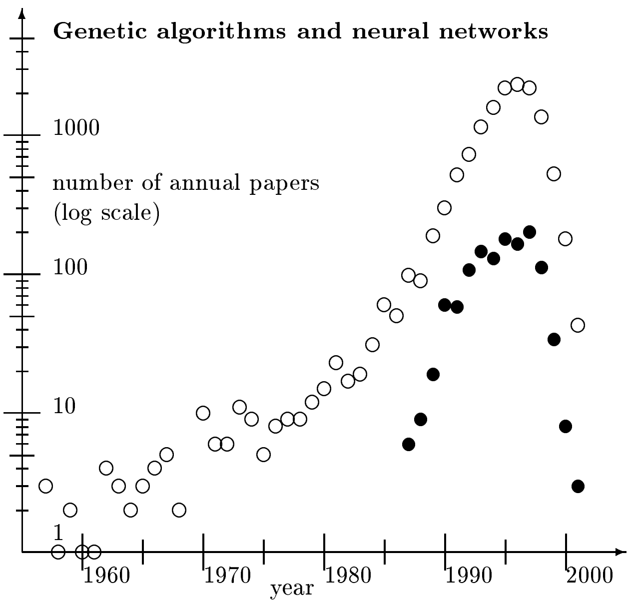

Figure 3.1: The number of papers applying **genetic algorithms and neural networks** (•) ∘ = total GA papers. Observe that the last few years are most incomplete in the database.

3.6 Conclusions and future

The editor believes that this bibliography contains references to most genetic algorithms and neural networks contributions upto and including the year 1998 and the editor hopes that this bibliography could give some help to those who are working or planning to work in this rapidly growing area of genetic algorithms.

Chapter 4

Indexes

4.1 Books

The following list contains all items classified as books.

4.2 Journal articles

The following list contains the references to every journal article included in this bibliography. The list is arranged in alphabetical order by the name of the journal.

Transactions of the Institute of System, Control, and Information Engineers (Japan), [465, 576]

Transactions of the Institute of Systems, Control and Information Sciences, [129]

Transactions of the Korean Insttute of Electrical Engineers (South Korea), [474]

Transactions of the Society of Instrument and Control Engineers (Japan), [549]

Transactions on Korean Insttute of Electrical Engineers (South Korea), [483]

Ukr. Biokhim. Zh., [575]

Water Science and Technology, [755]

Z. Angew. Math. Mech. (Germany), [351]

Z. Met.kd. (Germany), [392]

Zeitschrift der Deutschen Geologischen Gesellschaft, [437]

Zeitschrift fur Angewandte Mathematik und Mechanik, [383, 456]

Zhongguo Dianji Gongcheng Xuebao, [642]

total 338 articles in 224 series

4.3 Theses

The following two lists contain theses, first PhD theses and then Master's etc. theses, arranged in alphabetical order by the name of the school.

4.3.1 PhD theses

Ecole Normale Superieure de Lyon, [124]

North Dakota State University of Agriculture and Applied Sciences, [1032]

Oregon Graduate Institute of Science and Technology, [1151]

Politechnika Warszawska, [321]

Stanford University, [1045]

The Ohio State University, [1017]

University of California, [54]

University of Edinburgh, [1136]

University of Florida, [736]

University of Maryland College Park, [39]

University of Missouri - Rolla, [87, 101]

University of Reading, [857]

University of Stirling, [975]

University of Surrey, [699]

University of Tennessee, [970]

University of Washington, [890, 1220]

University of West Australia, [16]

total 19 thesis in 17 schools

4.3.2 Master's theses

This list includes also "Diplomarbeit", "Tech. Lic. Theses", etc.

Aarhus University, [52]

Case Western Reserve University, [216]

Leiden University, [30]

Leiden university, [874]

Lund Institute of Technology, [1121]

Tampere University of Technology, [78]

University of Dortmund, [1059, 1194]

University of Erlangen and The University of Tennessee, [64]

University of Helsinki, [570]

University of Turku, [746]

University of Utrecht, [107]

total 12 thesis in 11 schools

4.4 Report series

The following list contains references to all papers published as technical reports. The list is arranged in alphabetical order by the name of the institute.

Academy of Sciences of the USSR, [885]

Carnegie-Mellon University, [1037]

Colorado State University, [1198, 1201, 1202, 1203]

Deutsches Elektronen-Synchrotron, [877]

Ecole Normale Superiore, [1022]

Ecole Normale Supérieure de Lyon, [966]

Edinburgh Parallel Computing Centre, [1137]

Helsinki University of Technology, [841]

Honeywell-Corporate Systems, [977, 979]

Institute of Psychology CNR, [1084]

Iowa State University, [162]

LASPP-FER, [912]

NIBS Pte Ltd., [47]

National Research Counsil (C. N. R.), [285, 390]

National University of Singapore, [1147]

Naval Command, [1078]

Ohio State University, [1129]

Oregon Graduate Center, [1149]

Politecnico di Milano, [1062]

Ruhr-Universität Bochum, [1215]

Sverdrup Technology, [1117]

Technische Universität München, [964]

Technische Universität der Berlin, [875]

The University of Texas at Austin, [1089]

Universidad de Málaga, [843, 844]

University of Bonn, [1221]

University of Illinois at Urbana-Champaign, [943]

University of Joensuu, [359]

University of Karlsruhe, [1120]

University of Koblenz, [1161]

University of San Diego, [864]

University of Strathclyde, [1081]

University of Sussex, [36, 49, 68, 986, 987, 988, 989, 990, 991, 994, 1003]

University of Tampere, [559]

University of Virginia, [883]

Universität Karlsruhe, [31]

total 52 reports in 36 institutes

4.5 Patents

The following list contains the names of the patents of genetic algorithms and neural networks. The list is arranged in alphabetical order by the name of the patent.

Method and apparatus for training a neural network using evolutionary programming, [941]

4.6 Authors

The following list contains all genetic algorithms and neural networks authors and references to their known contributions.

Abdala, Ricardo Skaf, [156]
Abdalla, M. I. A., [157]
Abou-Zeid, Azza M., [825]
Abu-Alola, A. H., [158]
Accornero, N., [842]
Acheroy, Marc, [289]
Adams, R. G., [512]
Addis, Tom, [1175]
Adeli, H., [57]
Adgar, A., [183]
Aggarwal, R. K., [655, 686]
Agui, Takeshi, [24, 283, 1096, 1097, 1098, 1185]
Aguilar, J., [505]
Ahn, Seonha, [627]
Aho, Isto, [559]
Ai, Chen, [793]
Aiyoshi, E., [507]
Akamatsu, N., [487, 735, 747]
Alba Torres, Enrique A., [843, 844, 845, 846, 847]
Aldana Montes, José Francisco, [843, 844, 845, 847]
Alderighi, M., [703]
Aldrich, Chris, [765]
Aleksander, Igor, [812]
Alexander, D. M., [293]
Aliev, F., [440]
Alimi, A. M., [501]
Alkadhimi, K., [225]
Allen, Brian S., [709]
Allen, E. B., [363, 553]
Alpert, Bradley K., [848, 849, 850]
Altiparmak, Fulya, [176]
Amari, Sun-ichi, [872]
Anand, Vic, [1173]
Andersen, T., [704]
Andersen, Tim L., [237, 249]
Anderson, C. W., [1209, 1212]
Anderson, Charles W., [144]
Anderson, John, [386]
Anderson, P. G., [454]
Anderson, Peter G., [1106]
Anelli, P., [770]
Angeline, Peter J., [25, 147, 330]
Angelov, P., [705]
Ansari, Nirwan, [447]
Anthony, Denis, [851]
Aoki, Takeshi, [233]
Aoki, Y., [764]
Aoyagi, Yuji, [331, 448]
Apolinário Jr., J. A., [332, 506]
Ara, K., [374]
Arabas, J., [112]
Arafuka, M., [62]
Arai, Fumihito, [263, 271, 952, 957]
Arai, K., [507]
Arakawa, Takemasa, [694]
Arakawa, T., [631]
Araki, K., [658, 688]
Araki, Keijiro, [366, 666]
Arao, Masaki, [159]
Arena, P., [888, 889]
Arjona, Diego, [449]
Arkadan, Abdul-Rahman A., [509, 661]
Armstrong, Alun, [744]
Arulambalam, A., [447]
Asakura, Toshiyuki, [331, 448]
Asbury, Christopher T., [1106]
Atlan, Laurent, [1022]
Austin, Alan Scott, [26, 853]
Austin, Scott, [852]
Azevedo, F. M. De, [800]
Azevedo, Fernando M. de, [287]
Baba, N., [763, 854]
Baba, Norio, [603]
Back, Barbro, [160, 333, 451]
Badii, A., [855]
Baerdemaeker, J., [282]
Bai, B. D., [18]
Baidyk, Tatyana N., [203]
Balakrishnan, Karthik, [162]
Balakrishnan, K., [344]
Balasekar, S., [447]
Balicki, J., [250, 707]
Ball, A. D., [675]
Ball, N. R., [338, 856, 857]
Baluja, Shumeet, [163, 452]
Banzhaf, Wolfgang, [77]
Barham, John, [851]
Barnard, S. T., [869]
Barone, Dante Augusto Couto, [307]
Barreto, J. M., [728, 743, 800]
Barreto, Jorge M., [287]
Barton, S. A., [70, 248]
Bartscht, E., [461]
Baxter, J., [858]
Bebis, G., [541]
Bebis, George, [164, 453]
Becks, K.-H., [859]
Beer, Randall D., [860, 861]
BelBruno, Joe, [829]
Belew, Richard K., [862, 863, 864, 865, 866]
Belfore, II, Lee A., [509, 661]
Bellgard, Matthew I., [867]
Benediktsson, J. A., [510]
Bengio, Samy, [28]
Bengio, Yoshua, [28]
Bentink, M. W., [1119]
Bergman, Aviv, [868, 869, 870]
Berk, F., [795]
Berk, Friedrich, [383]

total 1228 articles by 1888 different authors

4.7 Subject index

All subject keywords of the papers given by the editor of this bibliography are shown next.

4.8 Annual index

The following table gives references to the contributions by the year of publishing.

1987, [868, 915, 916, 1027, 1166, 1192]

1988, [848, 849, 900, 901, 977, 1033, 1049, 1198, 1199]

1989, [850, 855, 862, 891, 899, 906, 907, 961, 978, 979, 1104, 1161, 1200, 1201, 1202, 1203, 1204, 1205, 1223]

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Notations

†(ref) = the bibliography item does not belong to my collection of genetic papers.
(ref) = citation source code. ACM = ACM Guide to Computing Literature, EEA = Electrical & Electronics Abstracts, BA = Biological Abstracts, CCA = Computers & Control Abstracts, CTI = Current Technology Index, EI = The Engineering Index (A = Annual, M = Monthly), DAI = Dissertation Abstracts International, P = Index to Scientific & Technical Proceedings, PA = Physics Abstracts, PubMed = National Library of Medicine, BackBib = Thomas Bäck's unpublished bibliography, Fogel/Bib = David Fogel's EA bibliography, etc
* = only abstract seen.
? = data of this field is missing (BiBTeX-format).

The last field in each reference item in `Teletype` font is the BiBTEXkey of the corresponding reference.

Appendix A

Abbreviations

The following other abbreviations were used to compress the titles of articles in the permutation title index:

AI	= Artificial Intelligence
Alg.	= Algorithm(s)
AL	= Artificial Life
ANN(s)	= Artificial Neural Net(work)(s)
Appl.	= Application(s), Applied
Appr.	= Approach(es)
Cntr.	= Control, Controlled,
	= Controlling, Controller(s)
Coll.	= Colloquium
Comb.	= Combinatorial
Conf.	= Conference
CS(s)	= Classifier System(s)
Distr.	= Distributed
Eng.	= Engineering
EP	= Evolutionary Programming
ES	= Evolutionsstrategie(n),
	= Evolution(ary) strategies
Evol.	= Evolution, Evolutionary
ExS(s)	= Expert System(s)
FF(s)	= Fitness Function(s)
GA(s)	= Genetic Algorithm(s)
Gen.	= Genetic(s), Genetical(ly)
GP	= Genetic Programming
Ident.	= Identification
Impl.	= Implementation(s)
Int.	= International
ImPr	= Image Processing
JSS	= Job Shop Scheduling
ML	= Machine Learning
Nat.	= Natural
NN(s)	= Neural Net(work)(s)
Opt.	= Optimization, Optimal,
	= Optimizer(s), Optimierung
OR	= Operation(s) Research
Par.	= Parallel, Parallelism
Perf.	= Performance
Pop.	= Population(s), Populational(ly)
Proc.	= Proceedings
Prog.	= Programming, Program(s), Programmed
Prob.	= Problem(s)
QAP	= Quadratic Assignment Problem
Rep.	= Representation(s), Representational(ly)
SA	= Simulated Annealing
Sch.	= Scheduling, Schedule(s)
Sel.	= Selection, Selectionism
Symp.	= Symposium
Syst.	= System(s)
Tech.	= Technical, Technology
TSP	= Travel(l)ing Salesman Problem

Appendix B

Bibliography entry formats

This documentation was prepared with LaTeX and reproduced from camera-ready copy supplied by the editor. The ones who are familiar with BibTeX may have noticed that the references are printed using `abbrv` bibliography style and have no difficulties in interpreting the entries. For those not so familiar with BibTeX are given the following formats of the most common entry types. The optional fields are enclosed by "[ ]" in the format description. Unknown fields are shown by "?". † after the entry means that neither the article nor the abstract of the article was available for reviewing and so the reference entry and/or its indexing may be more or less incomplete.

Book: Author(s), *Title*, Publisher, Publisher's address, year.

Example

John H. Holland. *Adaptation in Natural and Artificial Systems.* The University of Michigan Press, Ann Arbor, 1975.

Journal article: Author(s), Title, *Journal*, volume(number): first page – last page, [month,] year.

Example

David E. Goldberg. Computer-aided gas pipeline operation using genetic algorithms and rule learning. Part I: Genetic algorithms in pipeline optimization. *Engineering with Computers*, 3(?):35–45, 1987. †.

Note: the number of the journal unknown, the article has not been seen.

Proceedings article: Author(s), Title, editor(s) of the proceedings, *Title of Proceedings*, [volume,] pages, location of the conference, date of the conference, publisher of the proceedings, publisher's address.

Example

John R. Koza. Hierarchical genetic algorithms operating on populations of computer programs. In N. S. Sridharan, editor, *Eleventh International Joint Conference on Artificial Intelligence (IJCAI-89)*, pages 768–774, Detroit, MI, 20.-25. August 1989. Morgan Kaufmann, Palo Alto, CA. †.

Technical report: Author(s), Title, type and number, institute, year.

Example

Thomas Bäck, Frank Hoffmeister, and Hans-Paul Schwefel. Applications of evolutionary algorithms. Technical Report SYS-2/92, University of Dortmund, Department of Computer Science, 1992.