Preface

This volume contains the proceedings of EuroGP 2000, the European Conference on Genetic Programming, held in Edinburgh on the 15th and 16th April 2000. This event was the third in a series which started with the two European workshops: EuroGP'98, held in Paris in April 1998, and EuroGP'99, held in Gothenburg in May 1999. EuroGP 2000 was held in conjunction with EvoWorkshops 2000 (17th April) and ICES 2000 (17th-19th April).

Genetic Programming (GP) is a growing branch of Evolutionary Computation in which the structures in the population being evolved are computer programs. 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, music and picture generation, biomedical applications, etc. In recent years, even human-competitive results have been achieved by a number of groups.

EuroGP 2000, the first evolutionary computation conference of the new millennium, was the biggest event devoted to genetic programming to be held in Europe in 2000. It was a high quality conference where state-of-the-art work on the theory of GP and applications of GP to real world problems was presented. Like the two previous workshops, EuroGP 2000 was organized by EvoGP, the genetic programming working group of EvoNET, the Network of Excellence in Evolutionary Computing. 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 conference was sponsored by EvoNET and Marconi Telecommunications.

In total 39 papers were submitted to the conference by researchers in 23 different countries. Through a rigorous double blind review process 27 papers where accepted for publication in this volume and for presentation at the conference (14 for oral presentation and 13 as posters). Many of these are by internationally recognised researchers in genetic programming and evolutionary computation and all are of a high quality. This has been ensured by an international program committee including the best GP experts worldwide. We would like to thank them for their thorough work and dedication.

We would also like to thank John Koza, the father of the field of genetic programming, who gave a tutorial at the conference, and David Goldberg, one of the most influential researchers in the field of evolutionary computation, who gave an invited speech.

April 2000   Riccardo Poli, Wolfgang Banzhaf, William B. Langton
Julian Miller, Peter Nordin, and Terence C. Fogarty

Organization

EuroGP 2000 was organized by EvoGP, the EvoNet Working Group on Genetic Programming.

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