

Foreword to the
Proceedings of the CSCS Workshop on
Genetic Programming Theory and Practice

University of Michigan

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I was very happy and excited when I was invited to participate to the workshop on Genetic Programming (GP) Theory and Practice organised by the Center for the Study of Complex Systems (CSCS) held at the University of Michigan, Ann Arbor, in May 2003. The focus of this workshop was explicitly on how theory and practice should interact and what they can teach each other: an important and timely topic, particularly in the light of the many, but still very recent and not widely understood, developments seen in GP theory the last few years.

The participants' list was impressive, including many of the most influential and respected GPers and non-GPers "in the block". I was really looking forward to attend this workshop and learn and interact with them all, when "disaster" struck: I discovered that our new baby would be born only days before the workshop, which made it impossible for me to leave my family and attend the event. To punish me for my desertion the organisers of the event, Rick Riolo and Bill Worzel, very kindly asked me whether I would write a foreword for this volume gathering the proceedings of the workshop — an invitation I was very glad to accept.

I am very impressed by the quality of the papers presented at the workshop and now printed in this volume, both in terms of the novelty and importance of theoretical results and the variety and credibility of real-world applications of genetic programming. In terms of both contributions to science and inspiration for future practical applications this workshop appears to have been a great success. Knowing the depth and breadth of many of the participants I have no doubts that the discussion of all contributions has been lively and enormously productive.

Many events take place regularly in evolutionary computation. However, very few are specifically devoted to genetic programming, and definitely none really focuses on the "theory meets practice" idea behind this workshop, which instead is an urgent topic, not just for genetic programming, but for the whole field of genetic and evolutionary computation. I hope this event will be the first of a series, where theoreticians and practitioners will be able to exchange and

generate new ideas, look back critically to what has been achieved and develop a vision of the things to come, thereby guiding and inspiring future research in genetic programming.

I am sure I will learn a lot from studying this volume in detail, and I am sure many others, practitioners and theoreticians alike, can gain much from doing the same — Thank you Rick and Bill for having put together such a high profile and inspiring event.

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