

SMGP'15 Chairs' Welcome

It is our great pleasure to welcome you to SMGP 2015, the second edition of the Semantic Methods in Genetic Programming workshop, initiated with the highly successful event we organized at PPSN'14.

Genetic programming (GP)—the application of evolutionary computing techniques to the creation of computer programs—has been a key topic in computational intelligence in the last couple of decades. In the last few years a rising topic in GP has been the use of semantic methods that provide a way of exploring the input-output behavior of programs, which is ultimately what matters for problem solving. This new approach has produced substantially better results on a number of problems and has been grounded in a body of theory, which informs algorithm design and builds interesting links with theoretical computer science and search-based software engineering. There are a number of research groups that are active in this area around the world, and the number of publications is growing each year.

This year, SMGP'15 is collocated with GECCO, the premiere event on evolutionary computation, which we consider an excellent opportunity to inform a wider group of people about this growing area of work. We can see the semantic methods being important beyond GP, in other areas of computational intelligence and machine learning. Researchers working in other branches of evolutionary computation are strongly encouraged to participate.

The workshop has accepted four high quality submissions—thanks are due to all who submitted their work. The speakers will be granted generous time for presentations, and we hope to foster and moderate lively discussions after each talk, not limited only to questions to the speakers, but possibly shaped more like brainstorming sessions. Apart from these presentations, the workshop will feature a panel discussion, where participation of the audience will be strongly encouraged.

We hope you will find this workshop not only a fresh update on the most recent developments in semantic GP, but also a thought-provoking event that materially contributes to our discipline.

With best regards,



Colin G. Johnson

Co-chair
University of Kent

Alberto Moraglio

Co-chair
University of Exeter

Krzysztof Krawiec

Co-chair
Poznań University of Technology

Michael O'Neill

Co-chair
University College Dublin