

## 5<sup>th</sup> Workshop on Symbolic Regression and Modeling at GECCO-2013



It is our great pleasure to welcome you to the 5<sup>th</sup> 2013 GECCO Workshop on Symbolic Regression and Modeling. Over the past four workshops, we have had interesting presentations and fantastic discussions around symbolic regression, genetic programming, and the increasing demands and opportunities to impact science and industry. We are looking forward to another great workshop with four accepted papers and two invited talks.

Symbolic Regression and Modeling is used to designate the search for symbolic descriptions, usually in the language of mathematics, to describe and predict numerical data in diverse fields such as industry, economics, finance and science.

Symbolic modeling captures the field of symbolic regression: a genetic programming based search technique for finding symbolic formulae on numerical data in order to obtain an accurate and concise description of that data in symbolic, mathematical form. In the evolutionary computation field it also captures learning classifier systems, if and when they are applied to obtain specific interpretable results in the field of interest.

The key discriminator of producing symbolic results over numerical results is the ability to interpret and analyze the results, leading either to acceptance by field experts, or to heightened understanding of the theory in the field of application. Interpretation is key, and the workshop will focus heavily on this. The workshop will focus on advances in using symbolic modeling for real world problems in industry, economics, finance and science.

Steven Gustafson

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