

Foreword

People have developed computer algorithms and heuristics for problem solving for decades. Much of this time was spent “proving” that one method was better than another, or that a particular method would perform optimally, in theory. As the famous saying states: “In theory, theory is the same as in practice. But in practice, it isn’t.” This truth has now become well recognized: Perfect solutions are no longer the goal in real-world problem solving, rather solutions are needed that are simply good enough and achieved in a short enough amount of time to be useful. To that end, efforts are now being made in earnest to examine the properties of diverse problem-solving techniques and search for ways to hybridize them for more effective and efficient procedures.

This Third International Conference on Hybrid Intelligent Systems (HIS’03) offers much vital information to the problem-solving practitioner. The topics of neural networks, evolutionary computation, fuzzy systems, support vector machines, clustering, classification, and others will undoubtedly be familiar. What is unfamiliar is the degree to which combinations of these methods and other techniques can be applied to a wide range of problems, which is evidenced in these proceedings. There remains the challenge of generalizing from problem to problem, understanding what it is that makes an approach effective in a particular setting and porting that approach to a new setting effectively. The papers offered here serve as data points for future data mining, as we endeavor to garner insight into how to craft the best combinations of approaches to our own problems.

It’s my pleasure to serve as the honorary chair of this event. I am especially pleased that this conference is taking place in Melbourne, Australia, where fifty percent of my genes got their start. We are all hybrids, after all. It is an exciting time, for even as the perceived rate of advance in the core methods of computational intelligence may appear to be slowing, the rate of advance in combining these techniques and addressing some of the most important issues and challenges we face continues to accelerate. I look forward to hybridizing that excitement with you at HIS’03.

Sincerely,

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Honorary Chair, HIS’03
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