

Preface

Intelligent Decision-making Technology (IDT) is a field of study related to gathering, processing, and exploiting data to achieve intelligent tasks. Research is predominantly software based, however, it requires and incorporates technology to build new or innovative tools that ultimately benefit society. Industry continues to invest in IDT, with many creating internal research facilities. Big data is the latest field to attract a significant investment from industry and a lot of research is being targeted to solve real-world problems.

IDT relies on innovative use of artificial intelligence (AI) techniques to employ human-like intelligence to emulate decision-making and solve data intensive problems. Researchers continue to improve existing techniques within the domain. This evolution in information processing and data centric decision-making has become a pervasive phenomenon within the community, especially for mobile computing. Technology is enabling the community to use mobile devices to access information on-the-go, forcing researchers to deliver more intelligent systems. Researchers continue to leverage off recent advances in information technologies and now collaborate across several domains to solve problems. The major threads in the book discuss the generation of strategy, controlling energy, interacting with social media, reasoning and research, or industry inspired applications. Intelligent Systems are becoming ubiquitous in a wide range of situations. These include facets of simple everyday actions on mobile devices through to more advanced enterprise-level applications in numerous domains. Society benefits daily, through digital news, socialization of relations, and enhancements derived from expert decision-making within knowledge-based systems.

All contributions in this book were sourced from authors supporting the series of activities associated with IDT. A call for chapters was issued following the 5th Conference on Intelligent Decision Technologies, held at Sesimbra, Portugal during 26–28 June 2013. Based on the submissions received, select authors were invited to enter a competitive process prior to acceptance. Following an iterative review

process, an innovative subset of topics and techniques have been included in this volume. The editors believe these promote or enhance decision-making techniques using AI techniques.

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