Foreword

“A baby learns to crawl, walk and then run.

We are in the crawling stage when it comes to

applying machine learning.” ~Dave Waters

Whether you are a student in any school or research fellow in any college, or post doctoral fellow, faculty, IT professional or for that matter any person who is drawn to cyber security, you will find something useful and enjoyable in this book. This book caters to the needs of the global research community. On going through these pages one shall also discover the profoundness of the influence which machine learning and data mining techniques have in developing defense solutions against attackers. It explores some of the most exciting solutions developed and the future opportunities for the current researchers. A lot of effort has been put into the designing of the book. It is written and compiled in a lucid, visually distinct and illustrative way which provides insights to the user about the manner in which upfront technologies like machine learning and data mining have integrated with cyber security. The inspiration to behind this book was to enlighten the researchers and to gather greater appreciation for a difficult and fascinating subject-machine learning. This book is exemplary of infinite applications that machine learning has.

These emerging technologies like machine learning and data mining are the gift of many tedious endeavors, a gift that posseses immense power to shape the futuristic secure cyberspace. We hope this book will contribute to the imagination of the young researchers in this field, there is so much yet to be discovered and invented by them. But this is only a first foot in this direction, many more volumes to follow. I congratulate all the authors as I think there are going to be many grateful readers who shall gain broader perspectives of the discipline of machine learning as a result of their efforts.