Preface

Cyber threats today are one of the expensive losses that an organization can face. Today, it is impossible to deploy effective cybersecurity technology without relying heavily on advanced techniques like machine learning and deep learning. Cybersecurity is a growing challenge in the era of Internet. This book addresses questions of how machine learning methods can be used to advance cybersecurity objectives, including detection, modeling, monitoring, and analysis of as well as defense against various threats to sensitive data and security systems. Filling an important gap between machine learning and cybersecurity communities, it discusses topics covering a wide range of modern and practical machine learning techniques, frameworks, and development tools to enable readers to engage with the cutting-edge research across various aspects of cybersecurity. The book focuses on mature and proven techniques, and provides ample examples to help readers grasp the key points. This cybersecurity book presents and demonstrates popular and successful artificial intelligence approaches and models that you can adapt to detect potential attacks and protect your corporate systems.

This book will assist readers in putting intelligent answers to current cybersecurity concerns into practice and in creating cutting-edge implementations that meet the demands of ever-more complex organizational structures. By the time you finish reading this book, you will be able to create and employ machine learning algorithms to mitigate cybersecurity risks.

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