

Preface

Critical infrastructure, including power grids, transportation systems, and financial networks, is increasingly targeted by cyber and physical threats. Traditional security measures struggle to keep up with evolving risks, necessitating advanced solutions. Deep Neural Networks (DNNs) offer powerful predictive analytics and proactive decision-making capabilities to enhance resilience and threat mitigation. This book explores the integration of DNNs in securing critical infrastructure, focusing on anomaly detection, risk assessment, and real-time response. By leveraging artificial intelligence, organizations can transition from reactive security approaches to predictive and preventive strategies, ensuring operational continuity and safeguarding essential services against emerging threats.