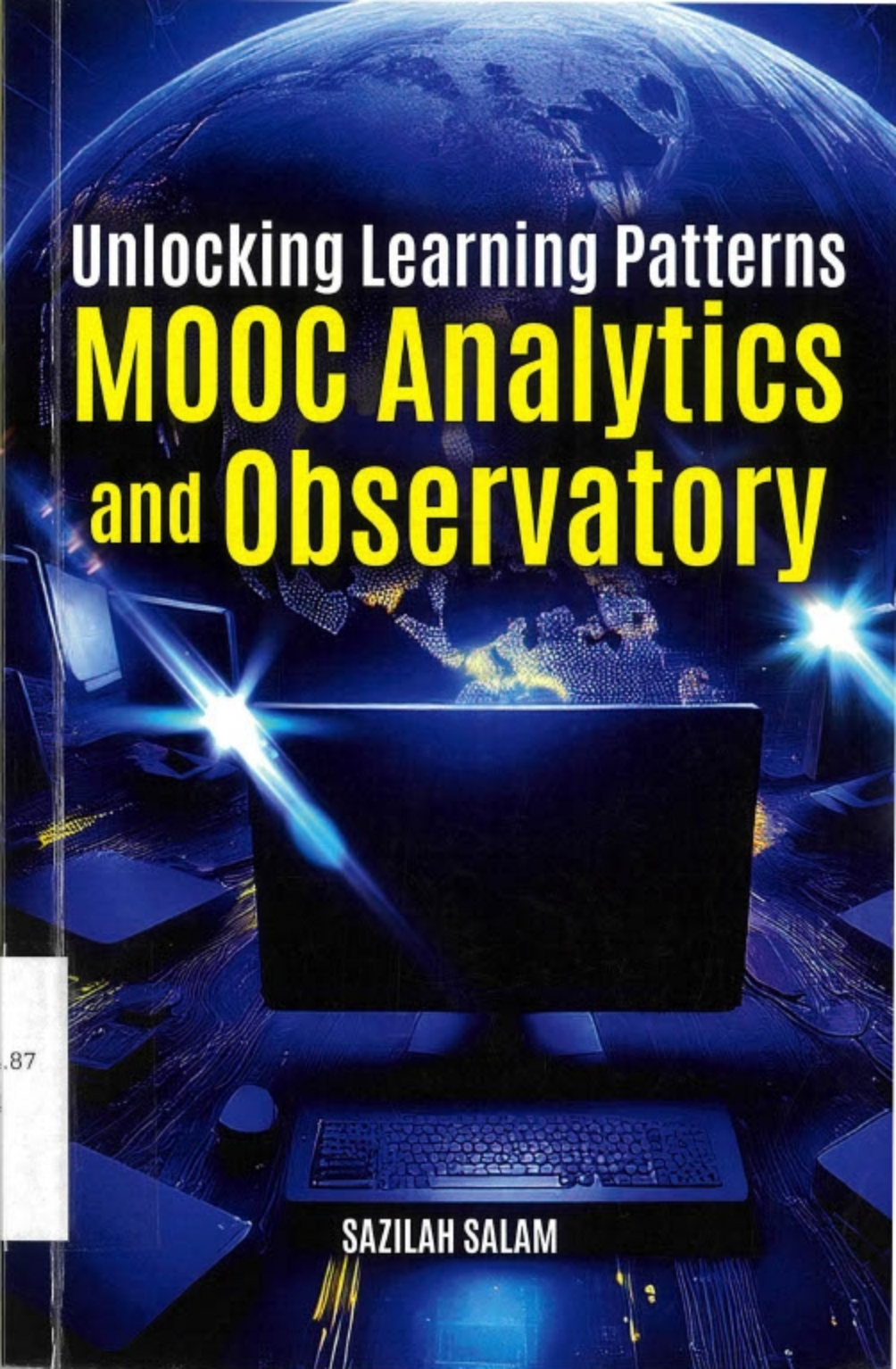
Unlocking Learning Patterns
MOOC Analytics
and Observatory
SAZILAH SALAM

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Unlocking Learning Patterns **MOOC Analytics and Observatory**

In an era where online learning is ubiquitous, this book addresses the critical challenge of managing and analyzing scattered MOOC learning data. As MOOCs become integral to higher education, institutions face the complex task of organizing diverse data from platforms like Coursera, Udemy, and edX. This book offers a pioneering solution to this problem. The journey begins with an exploration of key concepts, including MOOCs, web observatories, and existing MOOC platforms. It then delves into the intricacies of Linked Data and Semantic Webs, illustrating their significance in enhancing MOOC analytics. Chapter Three provides a hands-on guide to designing a MOOC Ontology using Protégé, creating a robust data model to facilitate effective data management. Further, the book explains how to merge MOOC Ontology with datasets using OpenRefine and RDF formats, and how to create a comprehensive MOOC repository with GraphDB. The final chapter reflects on the book's contributions and limitations and outlines future research directions. This comprehensive guide not only simplifies the complex world of MOOC analytics but also equips educators and administrators with practical tools to transform raw data into meaningful insights.

SAZILAH SALAM is a Professor of Computer Science at the Department of Interactive Media, Faculty of Information and Communication Technology, Universiti Teknikal Malaysia Melaka. She is also a Visiting Professor at the Web Science Institute, Faculty of Engineering and Physical Sciences, University of Southampton, United Kingdom. She obtained her BSc. (Hons.) in Computer Science from Universiti Teknologi Malaysia, Kuala Lumpur in 1989 and PhD in Multimedia Information Systems from University of Southampton, UK in 1997. Her current research work focuses on MOOC observatory, semantic Web, learning analytics, pervasive computing and assistive technology. She is active in doing research on latest education technology including mobile system and application, gamification, cooperative learning, flipped learning that apply and integrate augmented reality, speech recognition, cloud-based conversational robot, wearable technology, and massively multiplayer open role play games (MMORPG) to increase the efficiency of learning and teaching. Her deep interest in researching and improving the effectiveness of learning and teaching through cloud computing services has qualified her to be appointed as an AWS Educate Cloud Ambassador and certified as AWS Certified Cloud Practitioner.

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