Contents

About IFLA —— IX

Edmund Balnaves, Leda Bultrini, Andrew Cox and Raymond Uzwyshyn **Preface** —— **1**

Edmund Balnaves

Artificial Intelligence and Libraries: An Introduction —— 3

Part I: Current Directions in Artificial Intelligence for Libraries

Leda Bultrini

Current Directions for Artificial Intelligence in Libraries: An Introductory
 Overview —— 17

Juja Chakarova

3 Artificial Intelligence: Already in Libraries? —— 24

Mojca Rupar Korošec

4 Developing Artificial Intelligence in an Ethical Way in European Libraries —— 35

Bohyun Kim

5 Investing in Artificial Intelligence: Considerations for Libraries and Archives —— 49

Part II: The Implications for Use of Artificial Intelligence in Libraries and Education

Andrew Cox

6 The Implications for Use of Artificial Intelligence in Libraries and Education: An Introductory Overview —— 61

Fiona Bradley

7 The Policy Context of Artificial Intelligence —— 71

digitalisiert durch DEUTSCHE NATIONAL BIBLIOTHEK

Josette Riep and Annu Prabhakar

8 Toward Bias-free Artificial Intelligence for Student Success in Higher Education —— 82

Raymond Uzwyshyn

9 Building Library Artificial Intelligence Capacity: Research Data Repositories and Scholarly Ecosystems —— 121

Neli Tshabalala

10 Impact of Artificial Intelligence on Library Services: Reflections on a Practical Project —— 141

Andrew Cox

11 Ethics Case Studies of Artificial Intelligence for Library and Information Professionals —— 156

Part III: Projects in Machine learning and Natural Language Processing

Raymond Uzwyshyn

12 Projects in Machine Learning and Natural Language Processing in Libraries:
An Introductory Overview —— 171

Martin Malmsten, Viktoria Lundborg, Elena Fano, Chris Haffenden, Fredrik Klingwall, Robin Kurtz, Niklas Lindström, Faton Rekathati and Love Börjeson

13 Without Heading? Automatic Creation of a Linked Subject System —— 179

Anna Kasprzik

14 Transferring Applied Machine Learning Research into Subject Indexing Practice —— 199

Sümeyye Akça

15 Topic Modelling in the Ottoman Kadi Registers —— 213

Caroline Saccucci and Abigail Potter

16 Assessing Machine Learning for Cataloging at the Library of Congress —— 227

Thomas Zaragoza, Yann Nicolas and Aline Le Provost

17 From Text to Data Inside Bibliographic Records: Entity Recognition and Linking —— 239

Part IV: Artificial Intelligence in Library Services

Edmund Balnaves

18 Artificial Intelligence in Library Services: An Introductory Overview —— 259

Patrick Cher

19 Empowering Library Services: Building a ChatGPT Chatbot —— 261

Imam Khamis

20 Fundamentals of Artifical Intelligence for Libraries — 288

Helen Sau Ching Cheung, Alex Hok Lam Chan, Kenny Ka Lam Kwan and Yoko Hirose

21 Developing Digital Literacy Using Mini-AI Games —— 299

Itai Veltzman and Rael Elstein

22 How Ex Libris Uses Artificial Intelligence and Smart Services to Transform Libraries —— 323

Edmund Balnaves

23 Artificial Intelligence in Libraries on \$5 per Day: Image Matching with Koha —— 336

Glossary —— 351

Resources

International Federation of Library Associations and Institutions (IFLA). Artificial Intelligence Special Interest Group (AI SIG)

Resources to Get Up to Speed on Artificial Intelligence —— 359

International Federation of Library Associations and Institutions (IFLA). Artificial Intelligence Special Interest Group (AI SIG)

Generative AI for Library and Information Professionals —— 364

Contributors —— 372