

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

2 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

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**

Iman Khamis

- 20 Fundamentals of Artificial 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**

