

Advances in Artificial Intelligence, Computation, and Data Science

For Medicine and Life Science

Artificial intelligence (AI) has become pervasive in most areas of research and applications. While computation can significantly reduce mental efforts for complex problem solving, effective computer algorithms allow continuous improvement of AI tools to handle complexity—in both time and memory requirements—for machine learning in large datasets. Meanwhile, data science is an evolving scientific discipline that strives to overcome the hindrance of traditional skills that are too limited to enable scientific discovery when leveraging research outcomes. Solutions to many problems in medicine and life science, which cannot be answered by these conventional approaches, are urgently needed for society.

This edited book attempts to report recent advances in the complementary domains of AI, computation, and data science with applications in medicine and life science. The benefits to the reader are manifold as researchers from similar or different fields can be aware of advanced developments and novel applications that can be useful for either immediate implementations or future scientific pursuit.

Features:

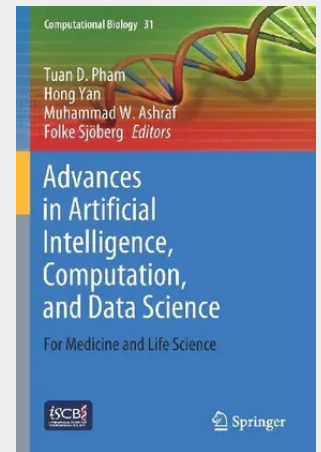
- Considers recent advances in AI, computation, and data science for solving complex problems in medicine, physiology, biology, chemistry, and biochemistry
- Provides recent developments in three evolving key areas and their complementary combinations: AI, computation, and data science
- Reports on applications in medicine and physiology, including cancer, neuroscience, and digital pathology
- Examines applications in life science, including systems biology, biochemistry, and even food technology

This unique book, representing research from a team of international contributors, has not only real utility in academia for those in the medical and life sciences communities, but also a much wider readership from industry, science, and other areas of technology and education.

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