Record Nr. UNINA9910678263603321 Computational life sciences: data engineering and data mining for life **Titolo** sciences / / edited by Jens Dorpinghaus [and three others] Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2023] ©2023 **ISBN** 3-031-08411-X Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (593 pages) Collana Studies in Big Data, , 2197-6511; ; 112 Disciplina 005.7 Soggetti Big data Ciències de la vida Processament de dades Gestió de bases de dades Mineria de dades Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Interesting Programming Languages used in Life Sciences --Nota di contenuto Introduction to Java -- Basic Data Processing -- Algorithm Design --Data and Knowledge Management -- Databases and Knowledge Graphs -- Knowledge Discovery and Al approaches for the Life Sciences --Longitudinal Data. Sommario/riassunto This book broadly covers the given spectrum of disciplines in Computational Life Sciences, transforming it into a strong helping hand for teachers, students, practitioners and researchers. In Life Sciences, problem-solving and data analysis often depend on biological expertise combined with technical skills in order to generate, manage and efficiently analyse big data. These technical skills can easily be enhanced by good theoretical foundations, developed from wellchosen practical examples and inspiring new strategies. This is the innovative approach of Computational Life Sciences-Data Engineering and Data Mining for Life Sciences: We present basic concepts, advanced topics and emerging technologies, introduce algorithm design and

programming principles, address data mining and knowledge discovery

as well as applications arising from real projects. Chapters are largely independent and often flanked by illustrative examples and practical advise.