This book covers a wide range of subjects in applying machine learning approaches for bioinformatics projects. The book succeeds on two key unique features. First, it introduces the most widely used machine learning approaches in bioinformatics and discusses, with evaluations from real case studies, how they are used in individual bioinformatics projects. Second, it introduces state-of-the-art bioinformatics research methods. The theoretical parts and the practical parts are well integrated for readers to follow the existing procedures in individual research.

Unlike most of the bioinformatics books on the market, the content coverage is not limited to just one subject. A broad spectrum of relevant topics in bioinformatics including systematic data mining and computational systems biology researches are brought together in this book, thereby offering an efficient and convenient platform for teaching purposes.

An essential reference for both final year undergraduates and graduate students in universities, as well as a comprehensive handbook for new researchers, this book will also serve as a practical guide for software development in relevant bioinformatics projects.