**Algorithmic Trading and Quantitative Strategies** provides an in-depth overview of this growing field with a unique mix of quantitative rigor and practitioner's hands-on experience. The focus on both empirical modeling as well as practical know-how makes this book a valuable resource for students and professionals.

The book starts with the often overlooked context of why and how we trade via a detailed introduction to market structure and quantitative microstructure models. The authors then present the necessary quantitative toolbox including more advanced machine learning models needed to successfully operate in the field. They next discuss the subject of quantitative trading, alpha generation, active portfolio management and more recent topics like news and sentiment analytics. The last main topic of execution algorithms is covered in detail with emphasis on the state of the field including the elusive concept of market impact. The book concludes with a discussion on the technology infrastructure necessary to actually implement algorithmic strategies in large scale production settings.

A GitHub repository with explanatory and exercise notebooks and data-sets supplementing the book further helps bringing the material to live.

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