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Altri autori (Persone)	PontiAndrea ArchettiFrancesco SabatellaAntonio
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Nota di contenuto	Preface -- Introduction -- MISO-AGP: dealing with multiple information sources via Augmented Gaussian Process -- MISO-AGP in action: selected applications -- Bayesian Optimization and Large Language Models -- References.
Sommario/riassunto	The book provides a comprehensive review of multiple information sources and multi-fidelity Bayesian optimization, specifically focusing on the novel "Augmented Gaussian Process" methodology. The book is important to clarify the relations and the important differences in using multi-fidelity or multiple information source approaches for solving real-world problems. Choosing the most appropriate strategy, depending on the specific problem features, ensures the success of the final solution. The book also offers an overview of available software tools: in particular it presents two implementations of the Augmented Gaussian Process-based Multiple Information Source Bayesian Optimization, one in Python -- and available as a development branch in BoTorch -- and finally, a comparative analysis against other available

multi-fidelity and multiple information sources optimization tools is presented, considering both test problems and real-world applications. The book will be useful to two main audiences: 1. PhD candidates in Computer Science, Artificial Intelligence, Machine Learning, and Optimization 2. Researchers from academia and industry who want to implement effective and efficient procedures for designing experiments and optimizing computationally expensive experiments in domains like engineering design, material science, and biotechnology. .