

Preface

This book explores the transformative impact of Artificial Intelligence (AI) across multidisciplinary engineering applications, focusing on design control and infrastructure systems. It delves into how AI technologies, including machine learning, optimization algorithms, and real-time data processing, are revolutionizing the way engineering challenges are addressed. From enhancing design efficiency and precision to optimizing infrastructure performance, AI is reshaping traditional engineering methodologies. Through a series of in-depth chapters, this work highlights innovative solutions, practical applications, and future directions for AI in diverse engineering domains, offering valuable insights for researchers, practitioners, and decision-makers in the field.

