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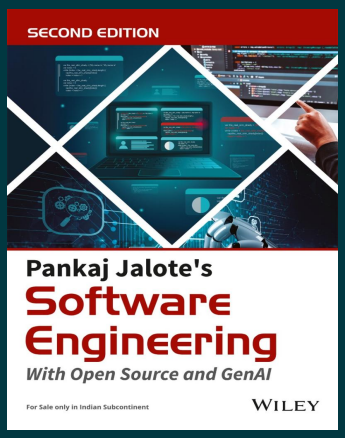

Pankaj Jalote's Software Engineering: With Open Source and GenAI, 2ed

By Pankaj Jalote

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Description

In the rapidly evolving software development landscape, the integration of open-source tools and Large Language Models (LLMs) is essential. Pankaj Jalote’s Software Engineering: With Open Source and GenAI equips students with the skills to excel in managing and contributing to software projects. This book is perfect for Software Engineering courses at both undergraduate and graduate levels.

The book introduces key concepts such as industry-standard software, open-source tools, and the fundamentals of LLMs. It covers important areas like project management, development process models, and team collaboration. As students progress, they will explore requirements analysis, architecture design, coding, testing, and application deployment, all with a focus on real-world applications.

This textbook provides practical methods, real-world examples, and a strong emphasis on leveraging open-source software and the application of LLMs in modern software development.

This textbook is perfect for faculties aiming to provide students with practical skills and knowledge to manage modern software projects using cutting-edge technologies.

About the Author

Pankaj Jalote

Pankaj Jalote is a Distinguished Professor at the Indraprastha Institute of Information Technology Delhi (IIIT-Delhi an institution where he also played a pivotal role as the Founding Director. His academic journey includes prestigious positions such as Chair Professor at the Indian Institute of Technology Delhi, Head of the Department of Computer Science and Engineering at IIT Kanpur, and an early career role as an Assistant Professor at the University of Maryland, College Park. Beyond academia, he has made his mark in the industry as the Vice President of Infosys Technologies Ltd. for two years and as a Visiting Researcher at Microsoft Corporation in Redmond for a year. His educational background is as impressive as his career, holding a BTech from IIT Kanpur, an MS from Pennsylvania State University, and a PhD from the University of Illinois at Urbana-Champaign.

He has authored six books. Among these is the highly regarded "CMM in Practice," which has been translated into multiple languages, including Chinese, Japanese, and Korean, and the widely used textbook "An Integrated Approach to Software Engineering." His contributions to the field have earned him recognition as a Fellow of the IEEE and the Indian National Academy of Engineering (INAE), and he has been honored with the Distinguished Alumnus Award from IIT Kanpur.

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