Integrated and Collaborative Product Development Environment - Technologies and Implementations

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With the rapid advances in computing and Internet technologies, an integrated and collaborative environment, which is based on the complementary functions of concurrent engineering and Internet-based collaborative engineering, is imperative for companies to facilitate and expedite the product realization processes. Topics such as concurrent and collaborative engineering, feature-based design and manufacturing, evolutionary computational techniques such as Tabu Search, Simulated Annealing, Genetic Algorithms, features, intelligent and computer-aided process planning are important strategies and enabling technologies for developing an integrated environment, facilitating modern product design and development. This book covers the state-of-the-art research and development status of these strategies and technologies. Implementation strategies and case studies are provided with an emphasis on technical details to help readers understand the underlying algorithms and infrastructures.

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