Artificial Intelligence Methods for Optimization of the Software Testing Process: With Several Industrial Case Studies

Dr. Sahar Tahvili, Ericsson AB, Sweden

This presentation will explore the application of artificial intelligence (AI) methods to optimize the software testing process, presenting several industrial case studies to illustrate the efficacy of these approaches. The research investigates various AI techniques, including machine learning, and neural networks, to enhance test automation, testbed optimization, and test case prioritization. The case studies demonstrate significant improvements in testing efficiency, accuracy, and cost-effectiveness across different industries. The findings suggest that AI-driven optimization can substantially streamline software testing, reducing time-to-market and improving software quality.