

Q&A: Minitab & AI



Q: Does Minitab use AI (Artificial Intelligence) in its products?

A: Minitab uses reliable and proven techniques like Reactive Machines (i.e. rule-based AI), Expert Systems, and Machine Learning in our solutions. All our methods are rigorously tested and are therefore immune to “AI hallucinations.” Unlike other companies that leverage third-party AI libraries, Minitab develops and stands behind its own AI.

Q: How does Minitab use Rule-Based AI (i.e. Reactive Machine AI)?

A: Reactive Machines (or rule-based AI) are basic rule-based systems that operate based on predefined rules. One example of Reactive Machines is Minitab’s proprietary Graph Builder that enables users to automatically visualize data through a drag-and-drop interface. Additionally, our Automated Capability Analysis automatically selects the proper distribution of data to perform the proper capability analysis. Importantly, all these rules were set up by experts at Minitab, trained in statistics, to ensure a reliable result.

Q: How does Minitab use Expert Systems?

A: Expert Systems are computer systems that mimic the decision-making ability of a human expert in a specific domain. One example of Expert Systems is Minitab Statistical Software’s Assistant Menu. The Assistant menu not only guides users through different analyses, but also provides an interpretation of the results and suggestions for next steps. All the steps and feedback from the Assistant Menu were designed by experts at Minitab to ensure a trustworthy process and recommendation.

Q: How Does Minitab use Machine Learning?

A: Machine Learning enables computers to learn from data and make decisions or predictions without being explicitly programmed to do so. Many Minitab users use Machine Learning today without even knowing it! For example, regression is a supervised Machine Learning technique used to predict continuous values. Minitab also offers more advanced predictive analytics that use tree-based Machine Learning techniques, as well.

Q: Does Minitab use a combination of different AI techniques?

A: Two examples of combined AI techniques are commands that automatically select the best predictive model, like Automated Machine Learning in our Predictive Analytics Module and Forecast Best Arima model in our Time Series library. They both use a combination of rule-based and Machine Learning AI.

Q: How can I be confident that Minitab's AI won't "hallucinate" and provide erroneous results?

A: To date, all our AI techniques are built and tested by Minitab. Our testing process is rigorous, as we know that our solutions help our customers keep their products safe and of the highest quality. Because we don't rely on third-party libraries we would not anticipate "hallucinations."

Q: Will Minitab continue to enhance their AI capabilities with new techniques like Large Language Models?

A: Minitab is committed to investing in our solutions to benefit our customers by providing additional features and functions while improving ease of use. We are actively researching ways to incorporate new technologies into our solutions, as long as we can deliver them in a reliable way that reflects our brand values: quality, trust, and accuracy.

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