

Q1. In the notes of Week 1, we compared & contrasted MLOps with DevOps. In this question, you need to understand what is meant by the term AIOps, & then contrast it with MLOps.

Ans: Artificial Intelligence for IT Operations (AIOps) is a term coined by Gartner in 2016 as an industry category for machine learning analytics technology that enhances IT operations analytics. AIOps is the acronym of "Algorithmic IT Operations". Such operation tasks include automation, performance monitoring, and event correlations among others.

There are two main aspects of an AIOps platform: Machine learning and big data. In order to collect observational data and engagement data that can be found inside a big data platform and requires a shift away from sectionally segregated IT data, a holistic machine learning, and analytics strategy is implemented against the combined IT data.

**While MLOps' goal is bridging the gap between data scientists and operation teams, therefore between ML model building and their execution, AIOps focuses on automating incidents management and intelligent root cause analysis.**

Q2. Interpretable Machine Learning is another concept that has attracted a lot of attention recently & is promoted by most of the MLOps frameworks. Explain what it means for a linear regression model to be interpretable.?

Ans: The linear regression model forces the prediction to be a linear combination of features, which is both its greatest strength and its greatest limitation. Linearity leads to interpretable models. Linear effects are easy to quantify and describe. They are additive, so it is easy to separate the effects. If you suspect feature interactions or a nonlinear association of a feature with the target value, you can add interaction terms or use regression splines.