Category

Data & AI

Data Literacy for Interpreting AI & ML Model Outputs Playbook

Reading a model's prediction and confidence score with enough understanding to know when to trust it

- Practitioner
- Intermediate
- Template Included

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- 4 minute(s)

Overview

A framework for building data literacy specifically around interpreting AI and machine learning model outputs — understanding confidence score meaning and limitations, recognizing model performance degradation over time, and appropriate skepticism toward model outputs outside their training distribution — addressing the gap between using model outputs and genuinely understanding what they do and don't reliably tell you.

Does a model's confidence score directly indicate how likely its

prediction is to be correct? Not necessarily — many models' confidence scores are not well-calibrated probabilities of correctness, and treating a high confidence score as guaranteeing

accuracy is a common and consequential misinterpretation this playbook specifically addresses.

What's "distribution shift" and why does it matter for interpreting

model output? Distribution shift occurs when the data a model encounters in production differs meaningfully from its training data — model outputs become progressively less reliable as this shift increases, even without any change to the model itself, making awareness of potential shift important for interpreting output reliability over time.

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