1. **What are 3 advantages of deploying using Model Serving methods Vs. deploying on GitHub Pages or HuggingFace for free?**

Below are the advantages of using Model serving methods for deploying

* The ML models can be scaled well.
* Maintaining the ML models is easy.
* Generates the predictions in real time.
* Deploying and releasing the models is much flexible.
* Decoupling of main application and model serving the application is achieved.

1. **What is ML model deployment?**

**The process of** integrating a machine learning model and integrate it into an existing production environment where it can take in an input and return an output. The purpose of deploying ML model is that one can make the predictions from a trained ML model available to others, whether that be users, management, or other systems.

Diagram

Description automatically generated

Diagram

Description automatically generated

1. **What is Causal Inference and How Does It Work?**

Causal Inference is the process where causes are inferred from data. Any kind of data, as long as have enough of it. Without impacting product roadmap or initiatives, Causal Inference still provides the ability to measure the effectiveness of an intervention.

Causal inference can be broken down into four simple steps: model, identify, estimate, and refute.

**Model**: This code actually takes the data and makes a causal model, or causal diagram

**Identify**: The identify step uses the causal diagram created from the model step and identifies all the causal relationships

**Estimate**: Using the estimand (the causal relationship identified) we can now estimate the strength of this causal relationship.

**Refute**: The refute steps tests the strength and validity of the causal effect found by the estimate step.

1. **What is serverless deployment and how its compared with deployment on server?**

It is a development model built for creating and running applications without the need for server management. They are provisioned, maintained, and scaled by a third-party cloud provider, while the developers just write and deploy the code.

[**https://opeyemibami.medium.com/deployment-of-machine-learning-models-demystified-part-2-63eadaca1571**](https://opeyemibami.medium.com/deployment-of-machine-learning-models-demystified-part-2-63eadaca1571)

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[**https://medium.com/@sravan.vadigepalli/causal-inference-part-1-a-must-read-for-practitioners-257846c561e3**](https://medium.com/@sravan.vadigepalli/causal-inference-part-1-a-must-read-for-practitioners-257846c561e3)

[**https://www.techmagic.co/blog/how-serverless-deployment-works-best-practices-principles-examples/**](https://www.techmagic.co/blog/how-serverless-deployment-works-best-practices-principles-examples/)