PurrspectiveAI: Machine Learning Engineering in action!

1 min

Anjali (MLE), Bruno (DS) and Carina (DE) are huge cat lovers! They want to build an app that solves the problem of abandoned street cats in metropolitan cities as efficiently as possible. (It's been shown that the lifespan of cats increases significantly when they're domesticated!) So they ideate and come up with PurrspectiveAI, a quick and efficient way to match a cat that's been found with either the closest shelter or a permanent home.

To put this app together, Bruno (DS) and Carina (DE) work together on the data acquisition. They scrape data on shelters in New York City for starters. Bruno works on finding a machine learning model that identifies the closest shelter to a geographic location within NYC. Carina builds a data engineering system that takes in three major inputs in real time: alerts from folks who find abandoned cats; locations of shelters across NYC; pet adopters and their preferences. Carina's system is designed to output a suitable candidate for cat adoption or a shelter to temporarily host the cat.

Meanwhile, Anjali (MLE) scopes out the design for a machine learning system that can run Bruno's (DS) model on scale. After all, the point is to not just solve this problem in NYC but in all cities across the world! Anjali decides on using Digital Ocean as the cloud provider that she would deploy the model on. She begins to build a machine learning pipeline using PySpark intended to incorporate Bruno's machine learning model that will sit within Carina's larger data engineering design.