Recommender System for Team Assignment

Team - 11

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KUBEFLOW

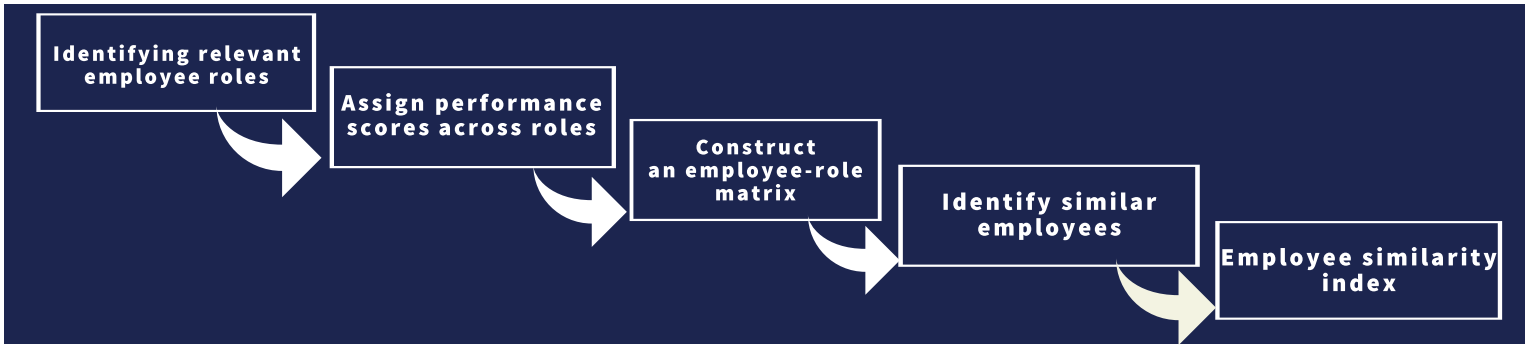
Kubeflow is dedicated to making deployments of machine learning (ML) workflows on Kubernetes simple, portable and scalable.

RECOMMENDER SYSTEM

- Mathematically-grounded method for team assignment.
- Selection process is less prone to bias.
- Manager intervention at later stage, until then allows focus on higher-involvement decisions.
- Assessing role-fit of team members not limited to own past experience.

BENEFITS OF KUBEFLOW

- JupyterHub: allows spawning Notebook servers for interactive development.
- TFJobs: allows monitoring your running Kubernetes training jobs
- Katib: hyperparameter tuning tools
- Pipelines: acyclic graphs of containerized operations written in Python, passing outputs to inputs.



KUBEFLOW ON GCP USING KUBERNETES

- The advantage of GCP is the ease of distributing and scaling out individual workflow components of the recommender system depending on resource demands.
- Kubernetes helps address the concerns of deploying, scaling and monitoring containers.

DATA

- Data of about 10 Million Dota2 professional matches, sourced from OpenDota, a community-maintained open-source Dota 2 data platform.
- Data is collected in JSON format, using OpenDota API's, pre-processed, converted into dataframes and stored as CSV
- The dataset has over 25 match level features