

Building Intelligent Recommender Systems Training

Course Outline

Course Introduction

Matrix-Based Recommender Systems

- Implement collaborative filtering with singular value decomposition (SVD):
 - Read sparse data into a GPU using **CuPy**.
 - Perform ALS efficiently with NumPy broadcasting rules.
 - Build a content-based filter with **cuDF**.

Training Wide and Deep Recommenders

- Build a wide and deep network using TensorFlow 2:
 - Build a deep network using Keras.
 - Build a wide and deep network using TensorFlow feature columns.
 - Efficiently ingest training data with NVTabular data loaders.

Challenges of Deploying Recommendation Systems to Production

- Deploy a recommender system in a production environment:
 - Acquire a trained model configuration for deployment.
 - Build a container for deployment.
 - Deploy the trained model using NVIDIA Triton Inference Server.

Conclusion

- Review key learnings and answer questions.
- Learn to build your own training environment from the DLI base environment container.