

Module 7 - AI Advanced Topics

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Objectives of This Module

Upon completion of this module, you will understand:

Module 7: AI Advanced Topics - Week 16

- Docker Containers –
 - <https://courses.cognitiveclass.ai/courses/course-v1:IBMDeveloperSkillsNetwork+CO0101EN+v1/course/>
- Graph Databases
- Cloud computing & Cloud providers
 - <https://learning.edx.org/course/course-v1:IBM+CC0101EN+2T2020/home>
- Edge computing & Edge AI
- Lab: Object detection

Fall 2021

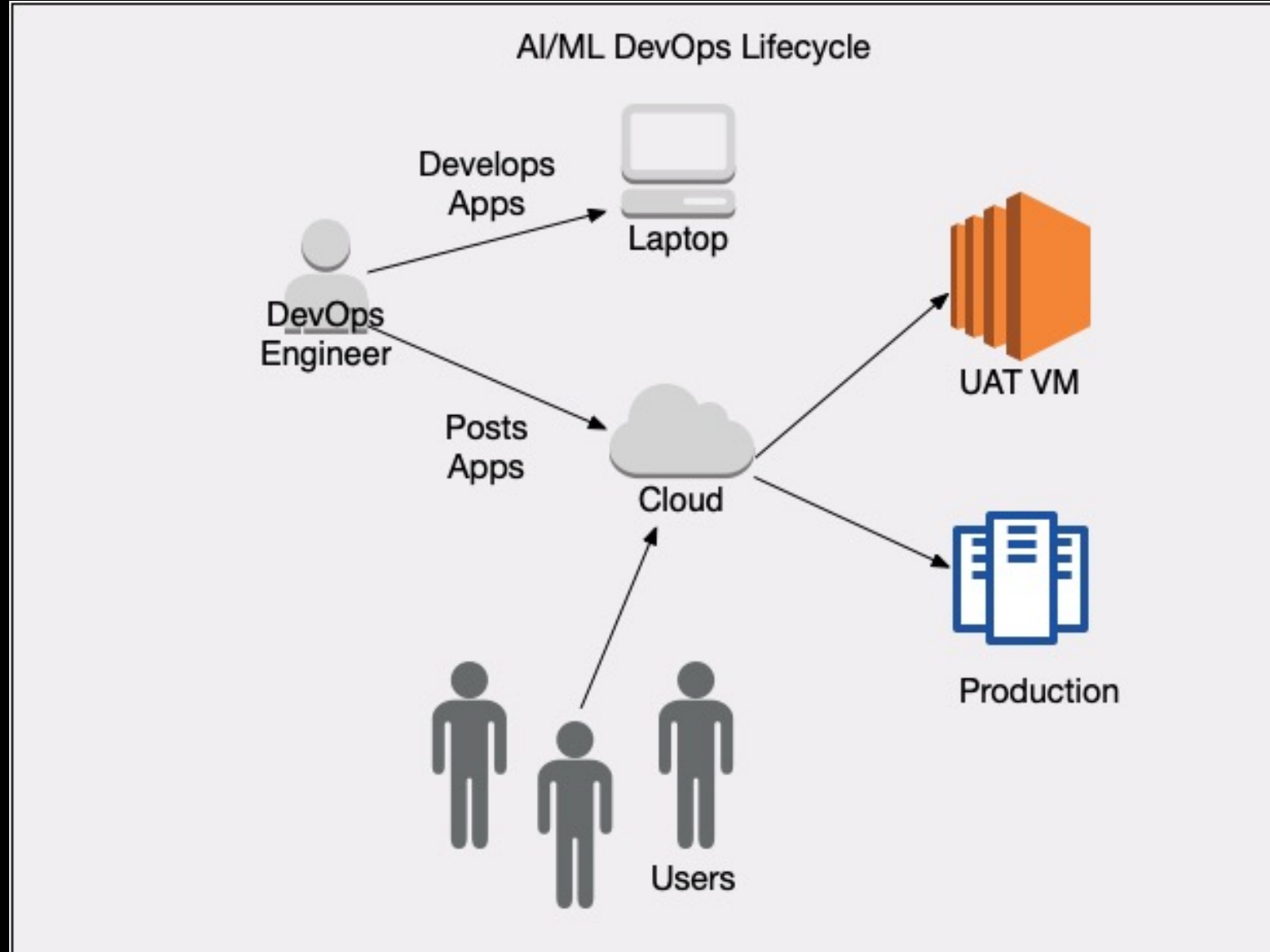
BADM 4830 / BAIM 4200 Advanced Business Analytics

- This course will give students the language, knowledge, and actionable methods to work alongside technical and non-technical members of your team to create AI solutions.
- Students will explore what it means to design artificial intelligence systems as a team, guided by a clear intent and a focus on people. This course will give you the framework and tools you need to recognize responsible AI design, align your team, and work with data sources to start building AI solutions.
- Students will learn the tools, technology, and practices that enable cross-functional AI teams to efficiently deploy, monitor, retrain, and govern models in production systems.

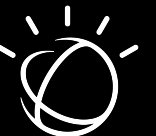
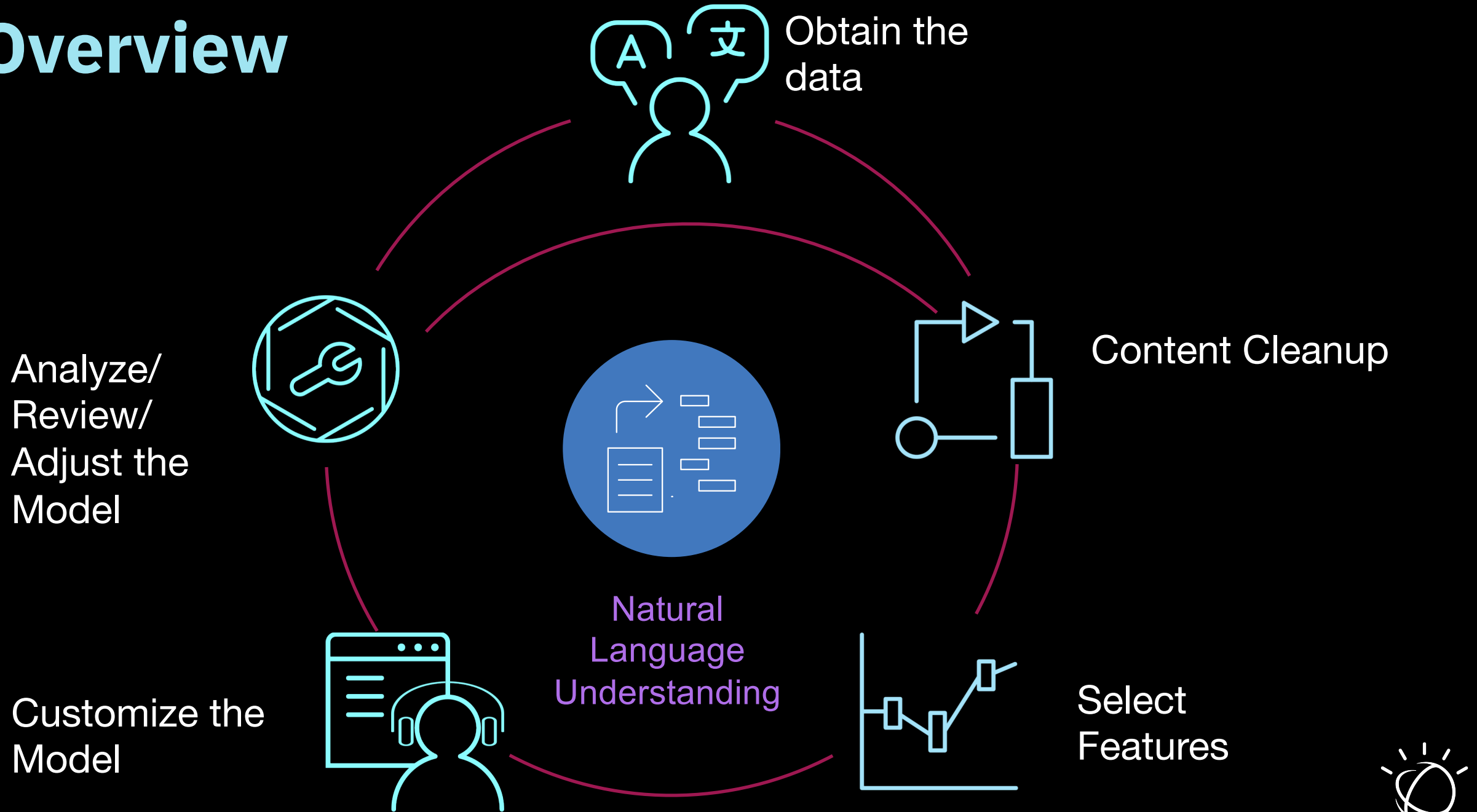
Re-cap

1. MLOps – DevOps Lifecycle
2. Natural Language Understanding
3. Lab -> Final Project (NLU & Twitter)

DevOps

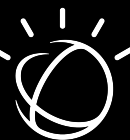


Overview



NLU Semantic Features to analyze -

- 1.**Keywords:** Determine the most important keywords in your content.
- 2.**Entities:** Detect important people, places, geopolitical entities and other types of entities.
- 3.**Relations:** Identify relationships between entities in your content.
- 4.**Concepts:** Identify general (DBpedia) concepts in your content.
- 5.**Categories:** Categorize your content into a hierarchical 5-level taxonomy.
- 6.**Sentiment:** Determine whether your content conveys positive or negative sentiment.
- 7.**Emotion:** Detect emotions such as anger, disgust, fear, joy or sadness that are conveyed by your content.
- 8.**Semantic roles:** Identify the subjects of actions, and the objects that they act upon.

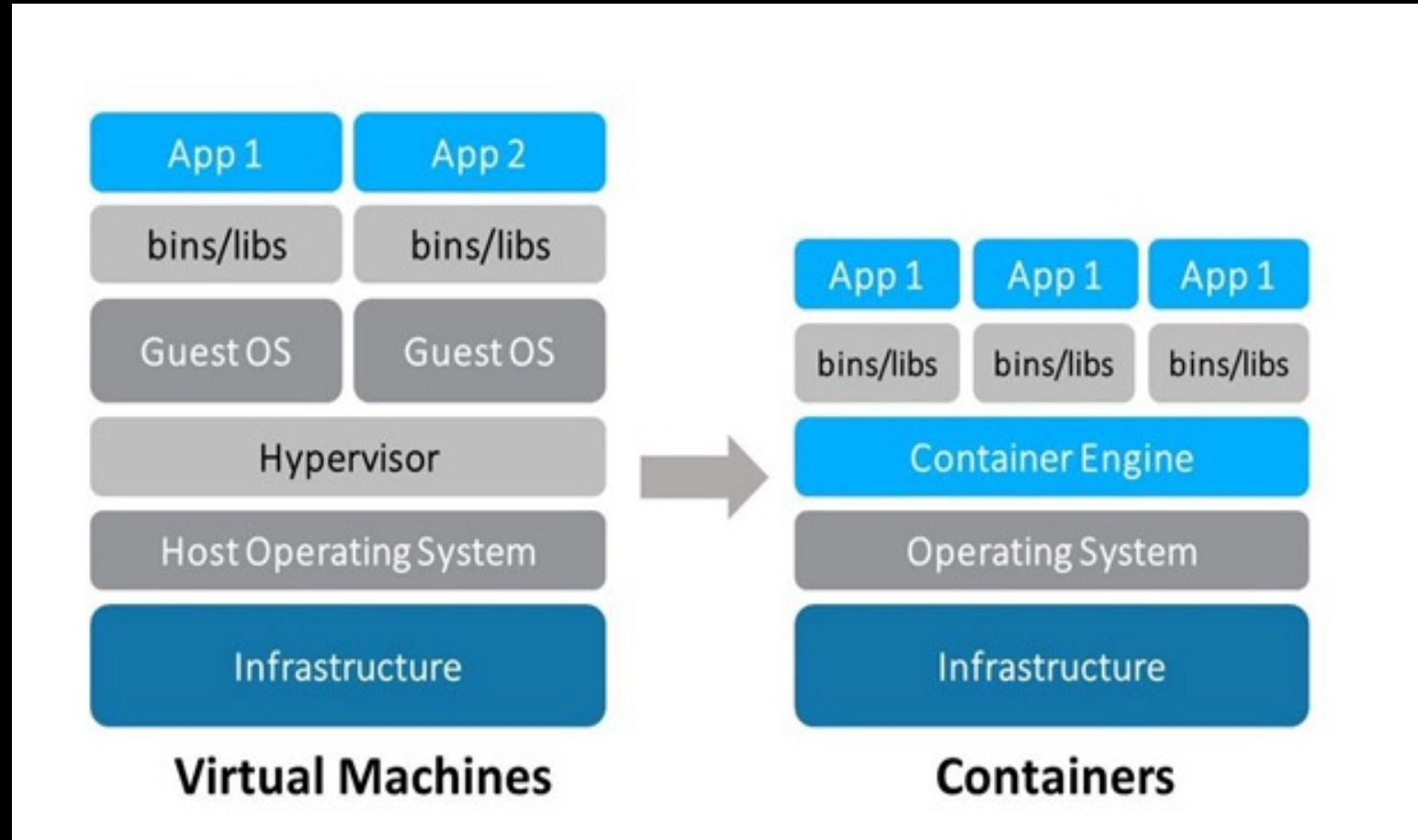


Final Project

Agenda

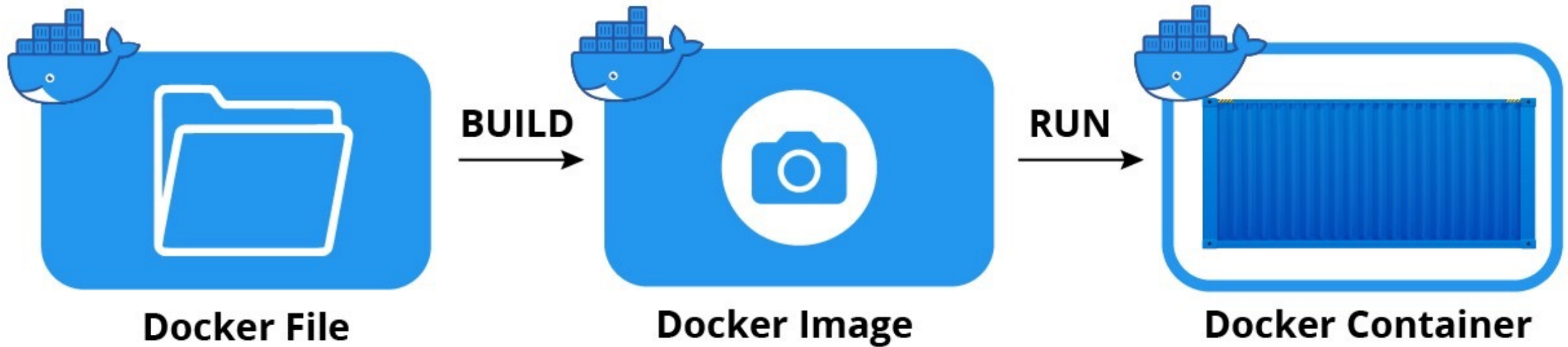
1. Docker
2. Graph Databases
3. Cloud computing – AI at the Edge

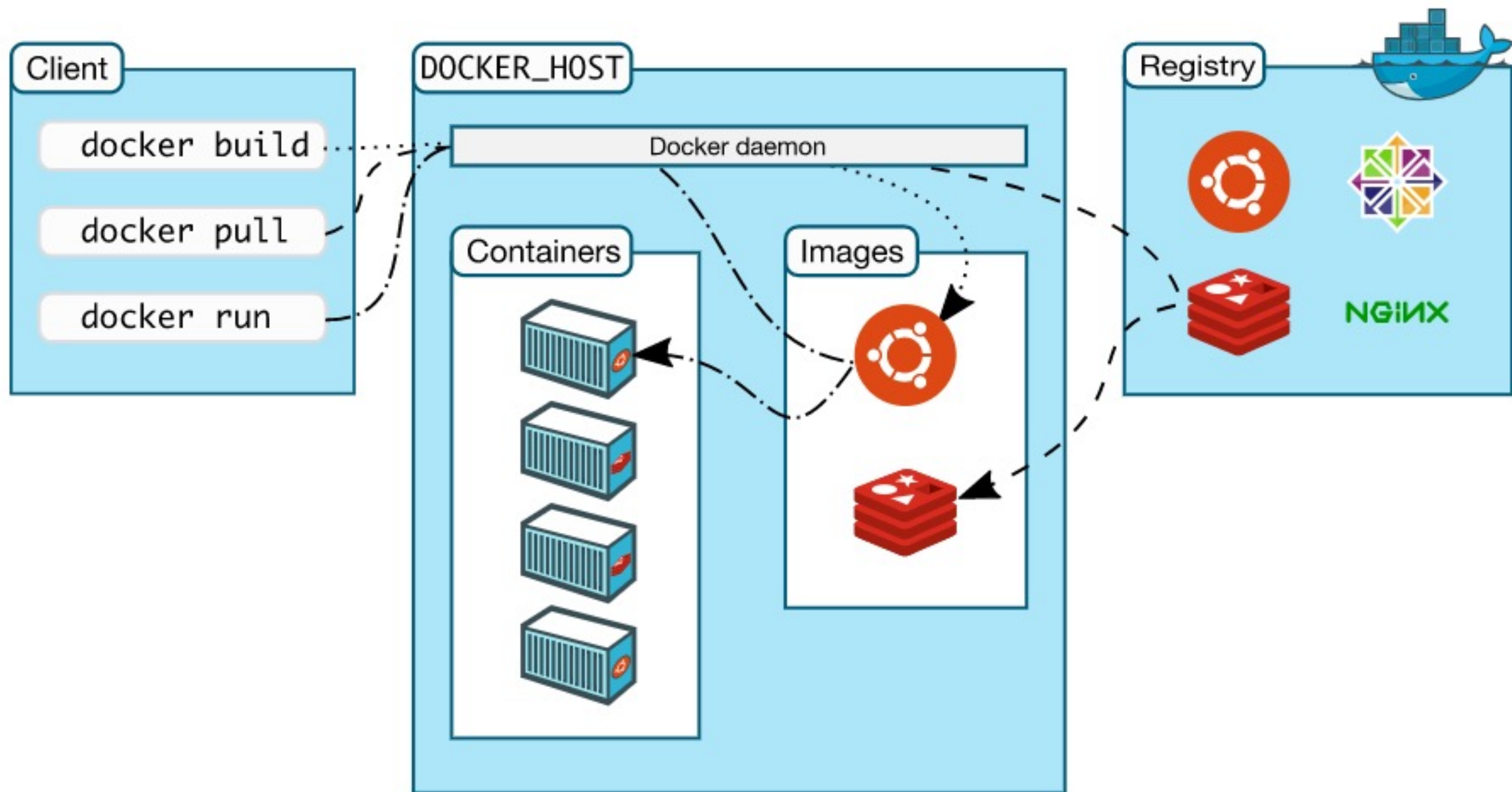
Docker 101



<https://docker-curriculum.com/>

Docker 101

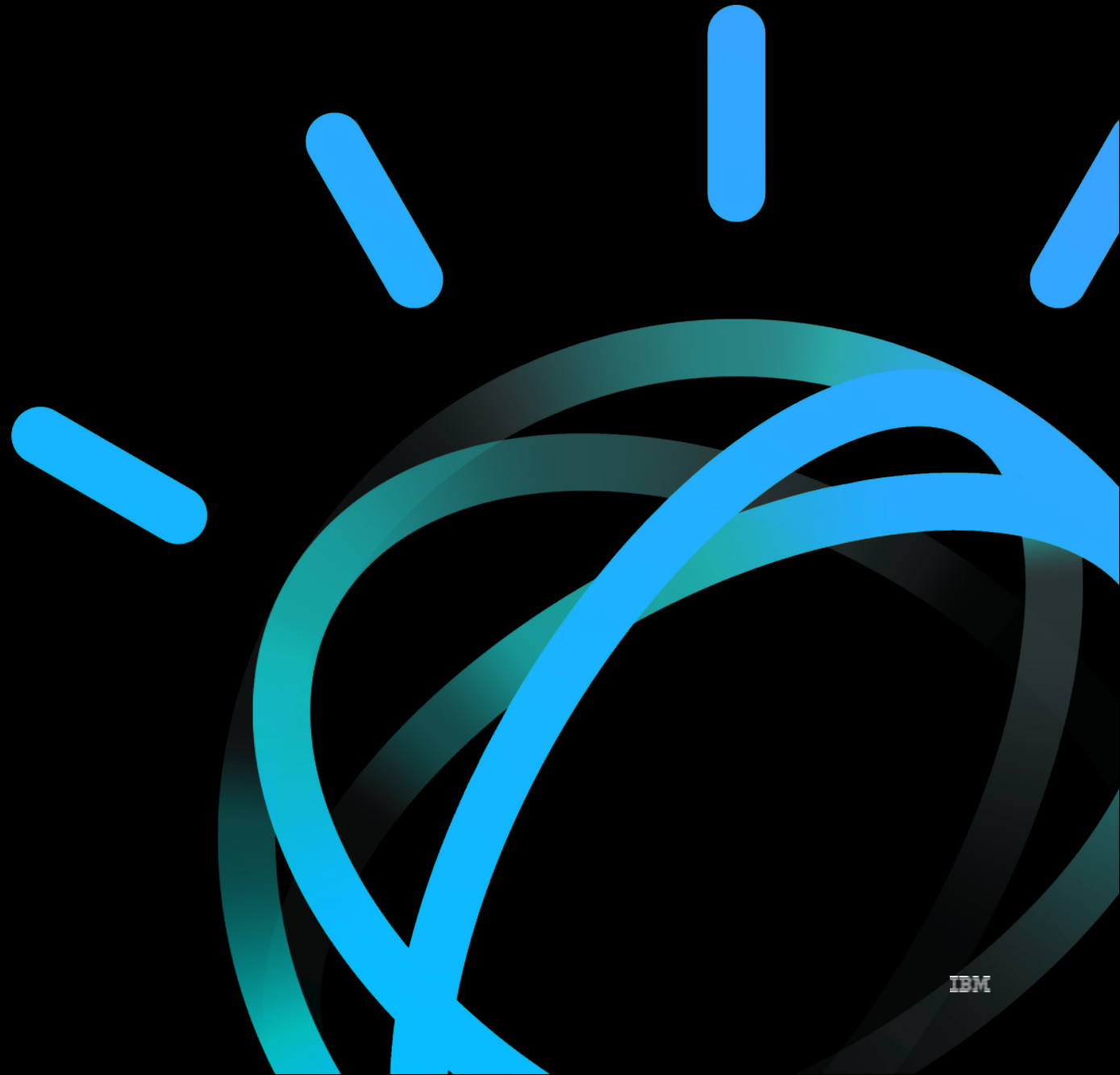




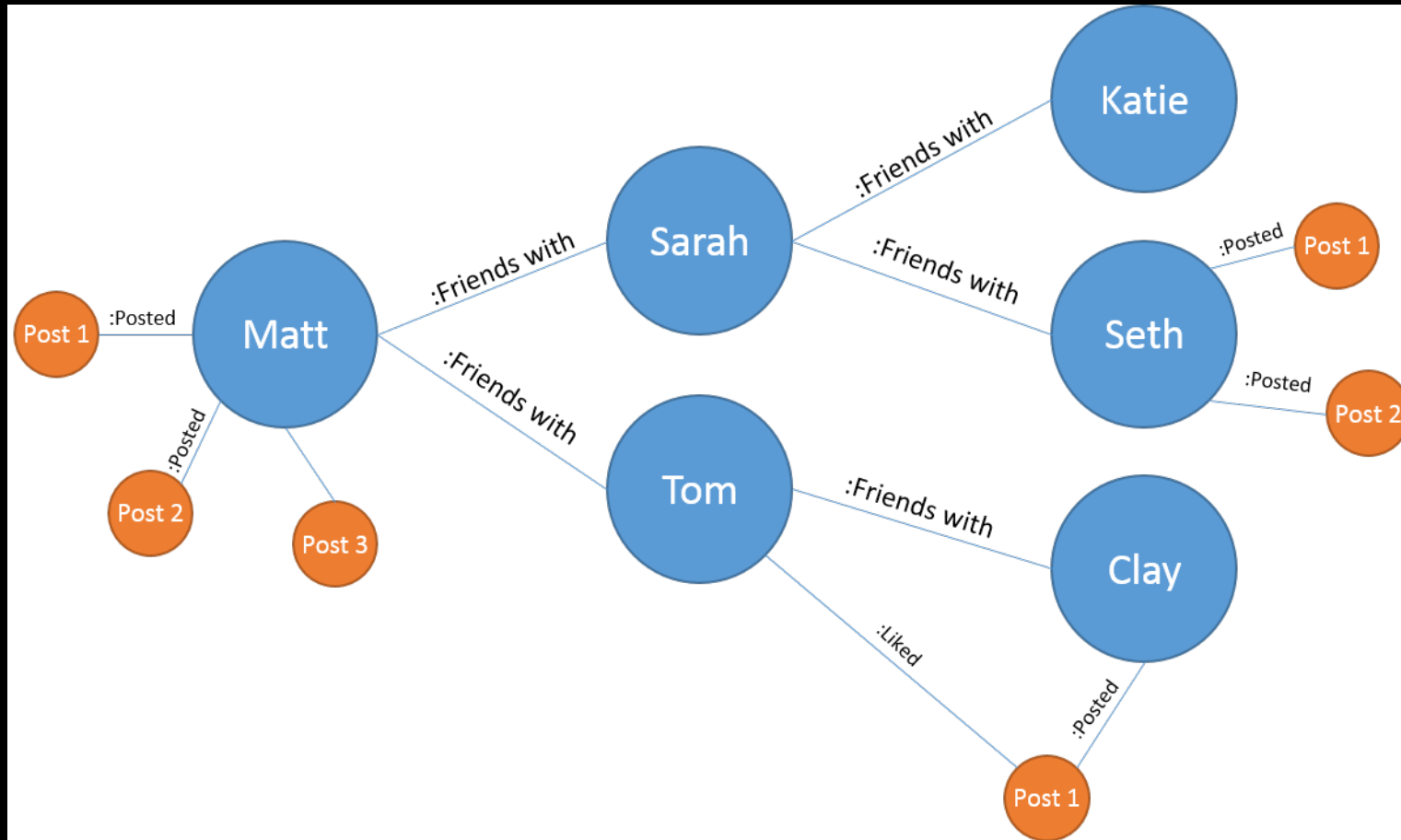
Lab

Graph Databases

Presenter: Ivan Portilla
Date:12/6/21



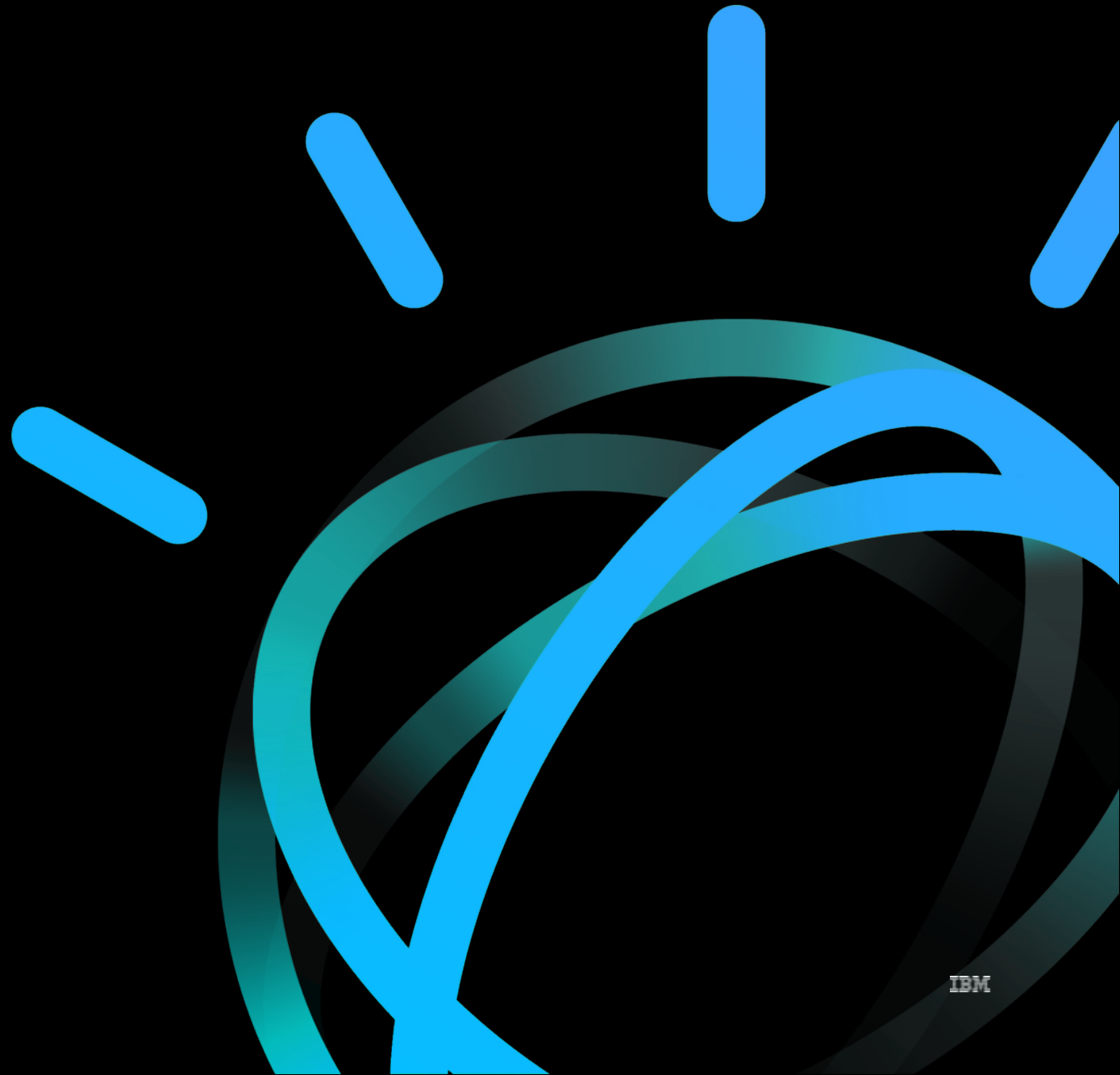
Nodes & Relationships



Lab

Edge Computing

Presenter: Ivan Portilla
Date:12/6/21

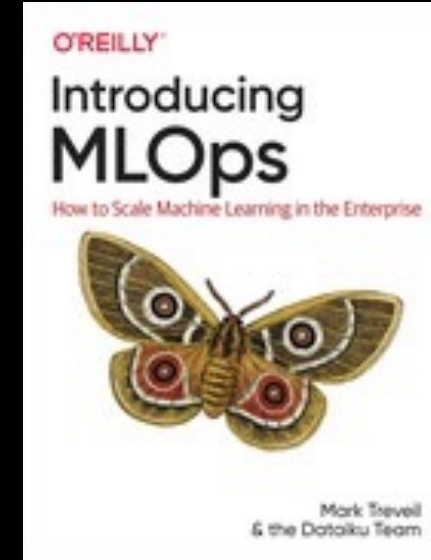
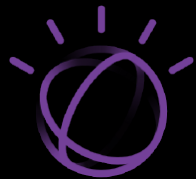


Q & A

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<https://medium.com/inside-machine-learning/ai-ops-managing-the-end-to-end-lifecycle-of-ai-3606a59591b0>