A Crash Course in Practical ML
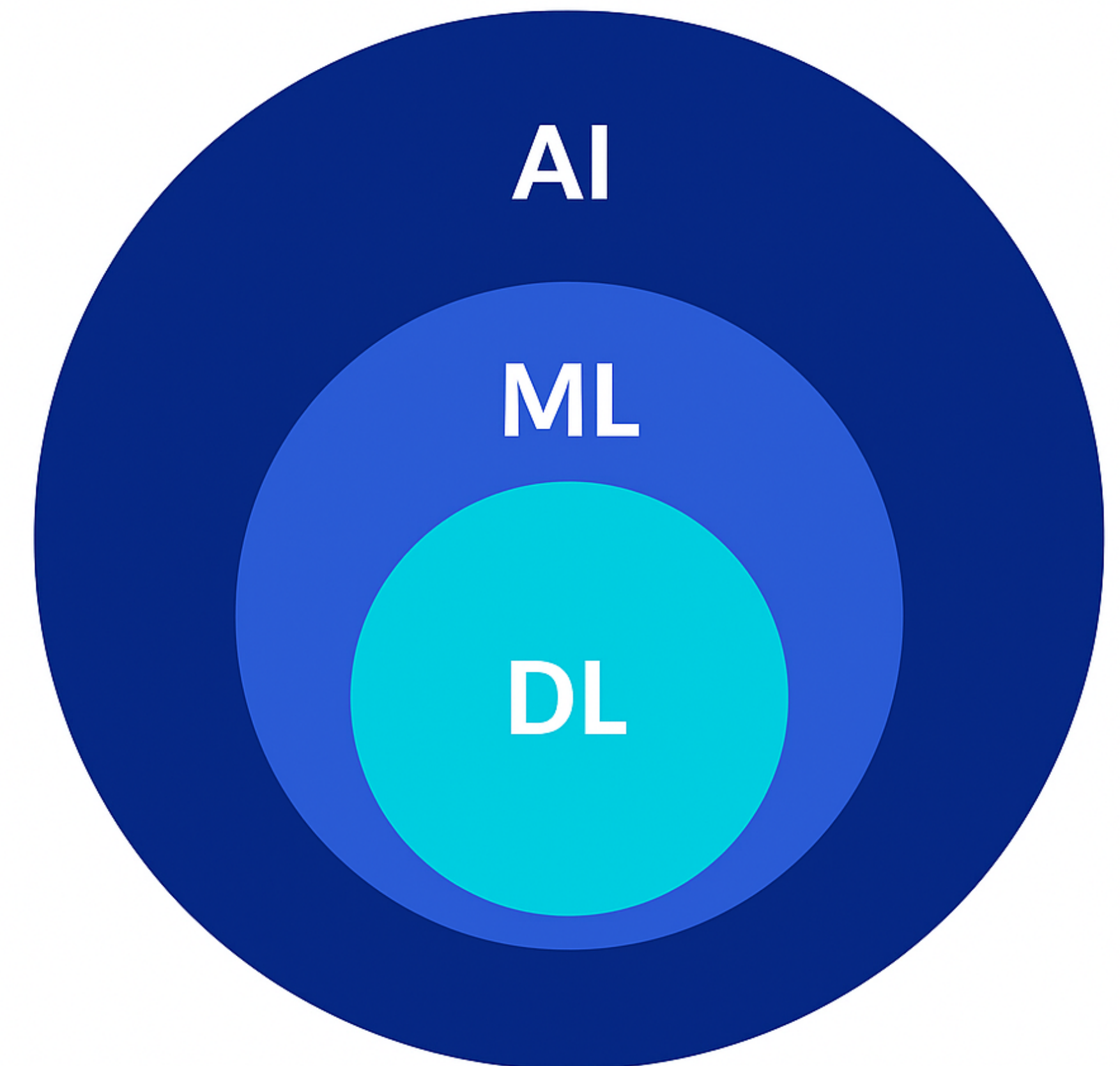
Day 3: Deep Learning Architectures

Gage DeZoort | October 29th, 2025
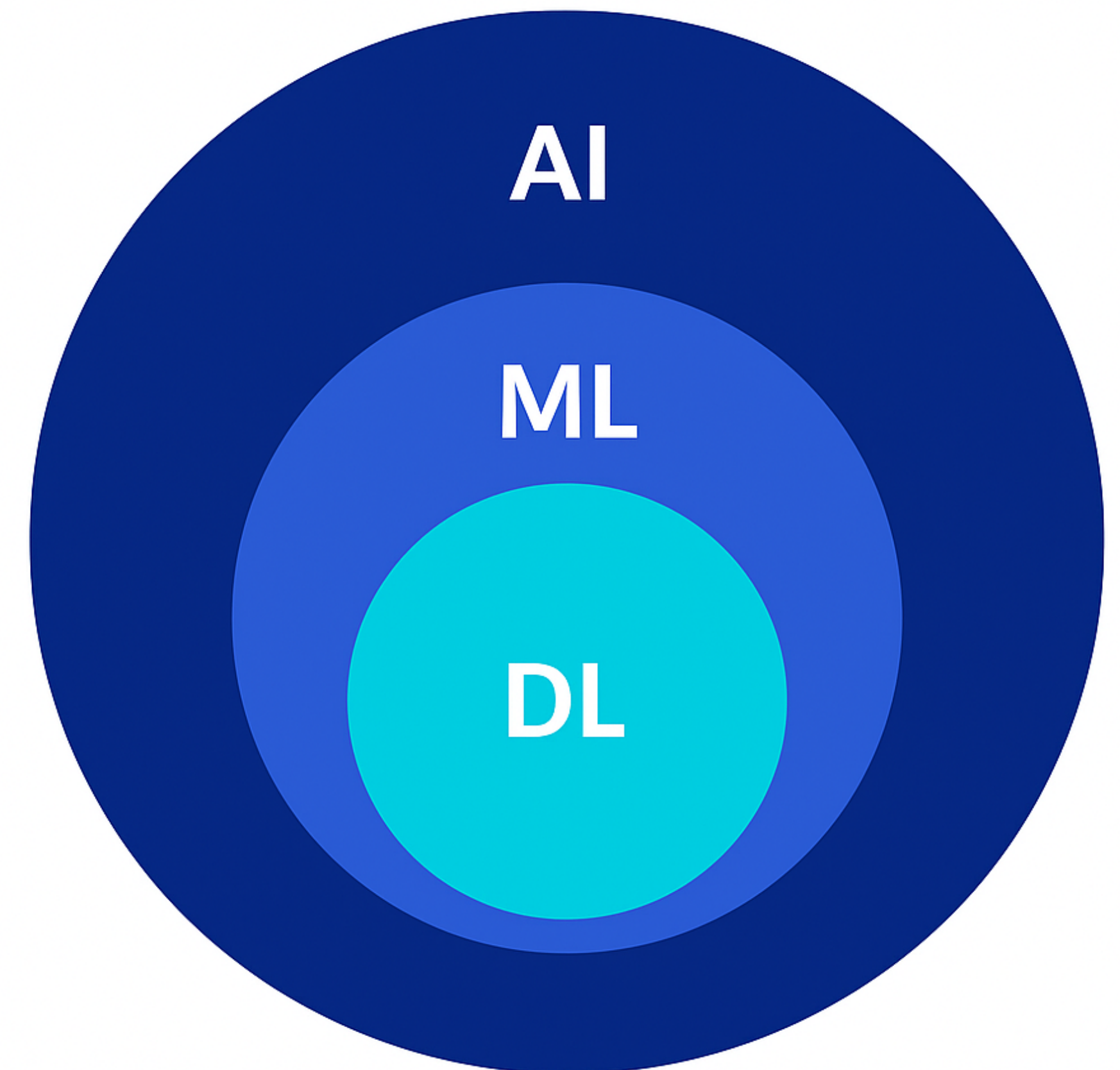
Course Timeline

- **~~Day 1~~** ~~(10/27, 5pm, ISEB 1010):~~
  ~~- Linear regression, linear classification, clustering with K-means, clustering with DBScan~~

- **~~Day 2~~** ~~(10/28, 5pm, Rowland Hall 101 + Zoom)~~
  ~~- Deep learning, introduction to neural networks (NNs)~~

- **Day 3** (10/29, 5pm, ISEB 1010):
  - Convolutional NNs, Graph NNs, transformers and attention

- All materials will be posted in the course's Git repo:
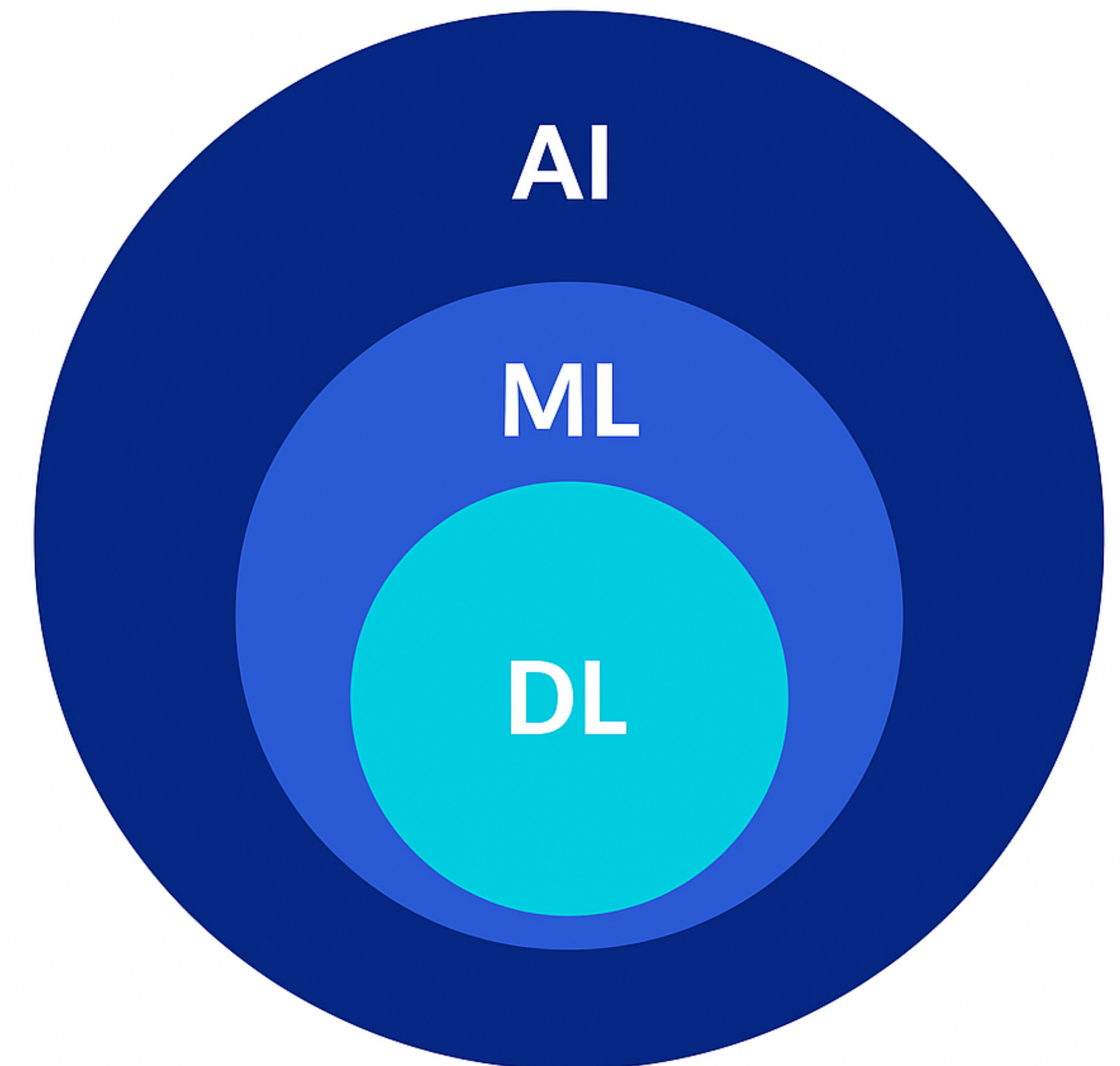 https://github.com/GageDeZoort/intro_ml_uci/tree/main

Artificial intelligence (AI), the broad endeavor to build systems that reason, plan, perceive, problem-solve, navigate etc.

Machine Learning (ML), algorithms that *learn* (without explicit programming) to model relationships in data and use them to make predictions

Deep Learning (DL), algorithms based on deep neural networks (NNs)

https://github.com/GageDeZoort/intro_ml_uci/tree/main

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