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Benchmarking Out-of-Distribution Detection in 2D Object Detection

Thesis Defense

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Introduction

- Deep Neural Networks, current best performers in
  - Classification
  - Object Detection
  - Segmentation
- Trained with *closed world assumption*, test data $\sim$ train data
- Deployed in open world $\implies$ Out-of-Distribution(OOD) examples
- Applications
  - Product recommendations, recoverable
  - Time series prediction, partially reversible
  - Autonomous driving / Medical diagnosis, irreversiable and catastrophic