

### ADVERSARIAL MACHINE LEARNING

## TAXONOMY OF ADVERSARIAL ATTACKS



Attack Position Based

- Poisoning
  - Perturbation of the training data

Evasion

Crafting adversarial examples at the testing phase



# FEATURE REPRESENTATION







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## TAXONOMY OF ADVERSARIAL ATTACKS

- Based on the intention of the adversary
  - Targeted
    - Multi class (Goal of adversary to have an adversarial example getting classified into a particular class)
      - e.g. Classify stop sign as speed up
    - Fooling anomaly detection (special case binary classification)
  - Non-Targeted
    - Goal of adversary is to just break the classifier

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