

## **Sample Selection**

Random

**K-Center** 

GraNd

CCS

**SAPS** 

## **Model Repair**

**DAPT** 

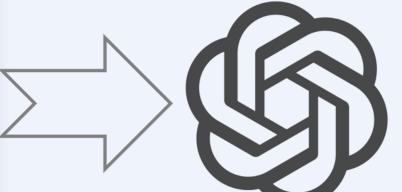
**DAPT+KL** 

**DPO** 

**IRepair** 

IRepair+KL

LLMs



## **RQ1: Interaction**

Effect of selection strategies on repair methods

**RQ2:** Efficiency

Trade-offs between selection cost and repair quality

**RQ3: Scaling** 

Effect of data proportion on SAPS performance

**RQ4: Boundary Value** 

Mechanism analysis of boundary vs. center samples

## **Key Findings**

- -- Sample selection consistently and significantly enhances both repair quality and efficiency
- -- SAPS consistently provides better balance between performance and computational cost
- -- Practical guidance is provided for designing scalable and data-efficient repair frameworks