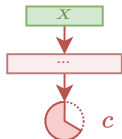


# Icarus Prudent RSM Architecture

## Out-of-Distribution Detector

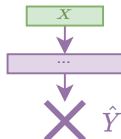


Confidence Score

Trained with

$$X_{ID} [\cup X_{OOD}]$$

## Prediction Model

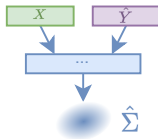


Point-Prediction

Trained with

$$(X_{train}, Y_{train})$$


## Uncertainty Quantifier



Uncertainty Range

Calibrated with

$$Y_{valid} - \hat{Y}_{valid}$$

Output:  $(Y \approx \hat{\Sigma}(\hat{Y})) \mid c$   prediction with **uncertainty**,  
conditioned by **confidence** score