

# A Causal View on Robustness of Neural Networks

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# Deep Learning Robustness

## What is Robustness in Deep Learning?

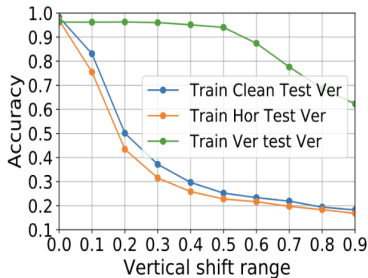
- DNNs are easily fooled by perturbations.
- Lack of robustness hinders application in safety critical environments (e.g. healthcare).
- Several solutions have been proposed. <sup>1</sup>

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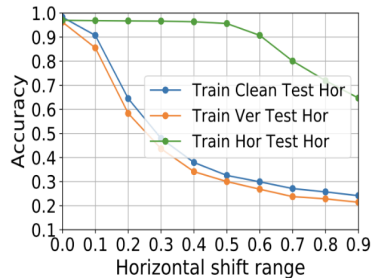
<sup>1</sup>causalView

# Related Work

## Adversarial Training



(a) Test Vertical shift



(b) Test Horizontal shift

Figure: Adversarial Training Results

# Causal Reasoning

What is Causal Reasoning?

