

A Causal View on Robustness of Neural Networks

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Deep Learning Robustness

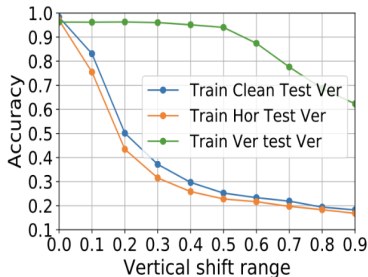
What is Robustness in Deep Learning?

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

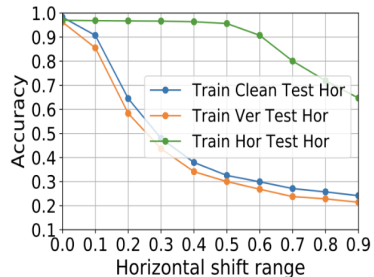
¹causalView

Related Work

Adversarial Training



(a) Test Vertical shift



(b) Test Horizontal shift

Figure: Adversarial Training Results

Causal Reasoning

What is Causal Reasoning?

