## VISUALIZING OVERFITTING AND MODEL COMPLEXITY

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**Abstract.** This project explores how increasing model complexity influences decision boundaries and generalization. Using 2D datasets, we have examined how different models separate data in input space, and how this reflects underfitting, overfitting, and the bias–variance tradeoff.

- 1. Introduction.
- 2. Experiment setup.
- 3. Results.
- 4. Conclusion. Some conclusions here.