Bias vs Variance

- If (Less complex algorithm i.e too simple algo i.e hypothesis with linear equation)
  Then (high bias and low variance thus is error-prone)

- If (more complex algorithm i.e too complex i.e hypothesis with high degree equation)
  Then (high variance and low bias thus new entries will not perform well.)

- This tradeoff in complexity is why there is a tradeoff between bias and variance.
- An algorithm can't be more complex and less complex at the same time.
- Low Bias and Low variance is not possible in practice.
  So, we trade off between bias and variance to achieve a balanced bias and variance.

Bias vs Variance			Variance	
			Sensitive to Changes in Training Data	
			Low	High
Bias	**Capture** the underlying Patterns in Data	Low	◉ Ideal scenario for ML model ◉ Able to capture pattern ◉ Not too sensitive	◉ Overfitting
		High	◉ Underfitting	◉ Unable to capture pattern ◉ Too sensitive