Induction vs. Deduction

Inductive inference

constructs or evaluates general propositions that are derived from specific examples

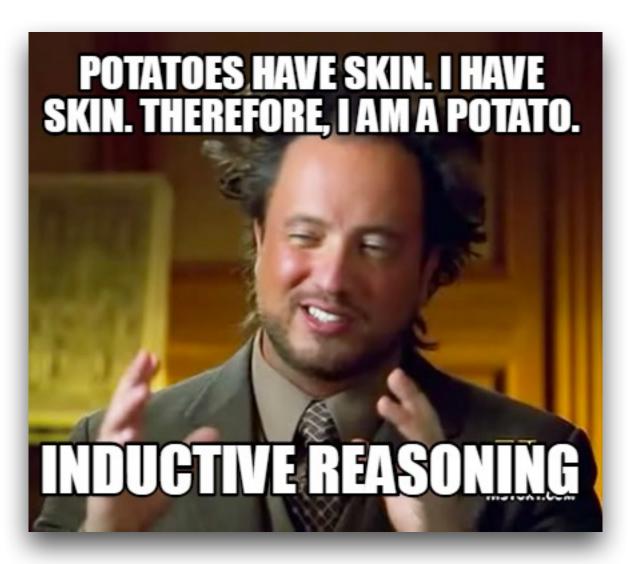
Example

We drop things several times and they fall each time

Conclusion: likely things always fall downwards when dropped

but we can never be sure, our conclusion can be wrong!

we draw uncertain conclusions from our relatively limited experiences



statistics are inherently inductive

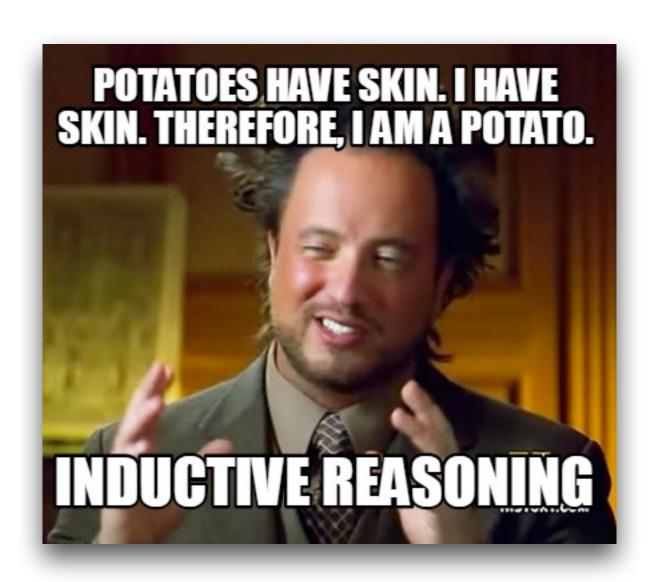
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Statistical Learning