

Why Machine Learning is not a good career option for Programmers?

(How to make a “Joker” out of a Programmer)

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Who does ML in a viable manner?

- The Biggies , their ridiculous budget and the resources
- Why they can afford it?
- “We all can drive a rolls Royce, but Ambani’s son can own and operate it”

Algorithmic Techniques

- Hilbert Space Methods
- Statistical Learning
- Deep Learning
- Probabilistic Graphical Models

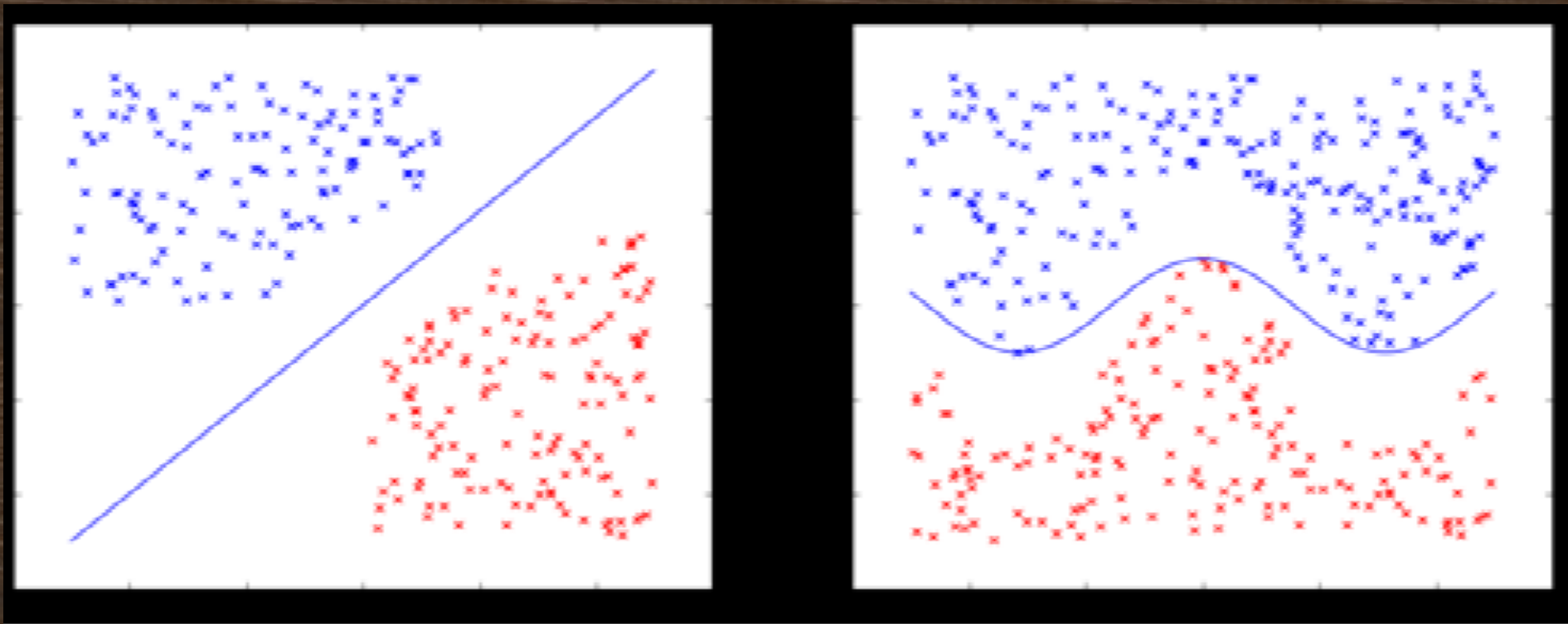
Machine Learning “anomalies”

- Algorithmic Intractability with Turing Machine/Lambda/Predicate Logic
- Linearity assumption with Hilbert space method
- Inductive errors inherent in statistical methods

Problems with Hilbert space method

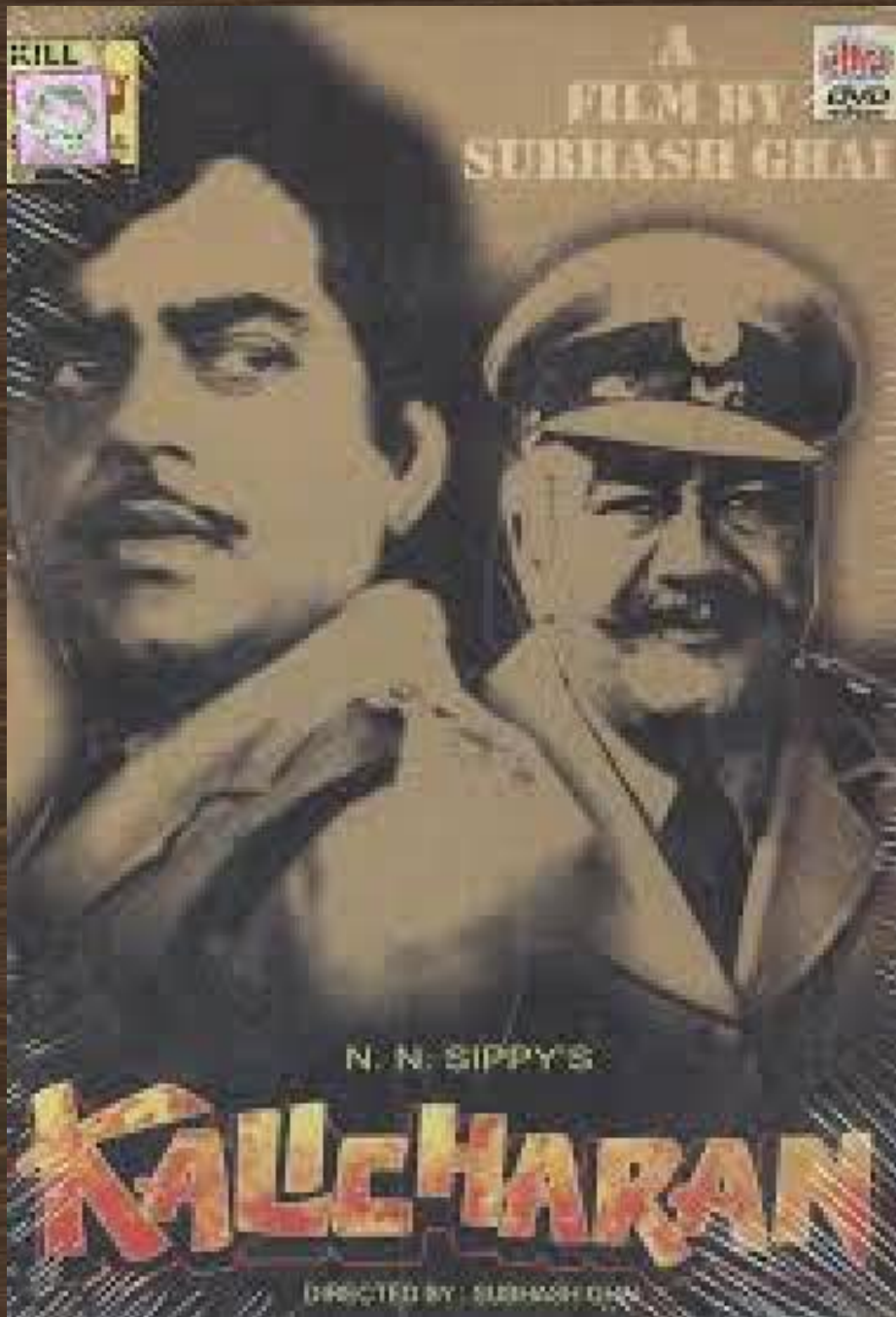
- It assumes that Variables independently act on the output
- The above assumption does not hold in most real life situations
- The variables are inter-dependent
- Some Anecdotes explaining this
 - Combination of people give different results

It is all about Linear Seperability



Statistical methods - anomalies

- The problem of induction
- Changes in the environment
- Effect of Exogeneous data
- Lack of pattern in data
 - Meta Trader Example



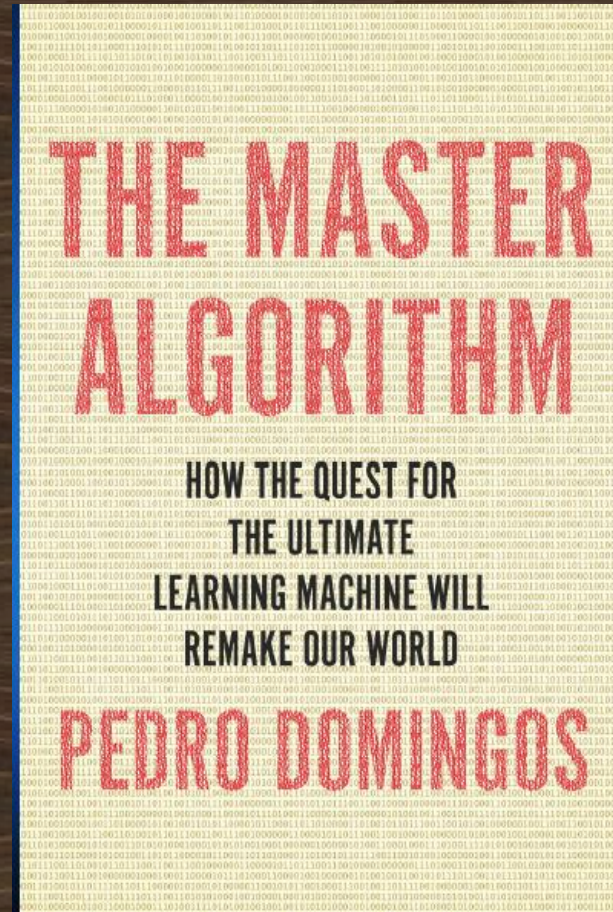
“Akalmānd apni akal se daulatmand ban sakta ha, magar daulatmand apni daulat se akalmand nahi ban sakta hai”

“An Intelligent person can become a machine learning expert, but, by doing machine learning one is not going to be intelligent”

Will more data helps us make NP problems tractable?

- No....”I have discovered a wonderful proof, where this session is too short for the explanation”
- More data won't produce better result (Central Limit theorem)

How to proceed from here?



Which is more important?



Aaj mere paas building(ML) hai,
property(lot) hai ,
bank balance (Blockchain) hai,
bungla(Appsec) hai,gaadi hai(DevOps)
Kya hai, Kya hai tumhare paas?

....Mere Paas Maa (Angular) hai