

# Machine learning with python

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# ML principles and caveats

- DISCLAIMER: This is an implementation course, not a theory course
- ML works best with lots of data, especially lots of high-quality data
  - "Garbage in  $\rightarrow$  garbage out"
- Overfitting is one of the biggest challenges, especially with very large models
- ML is still mostly a black box (and therefore generally not suitable for causal inference)
- Training large models with lots of data quickly becomes computationally expensive
  - Potential solutions: Acquiring a GPU, renting additional computing resources from AWS