

Data science in predictive maintenance

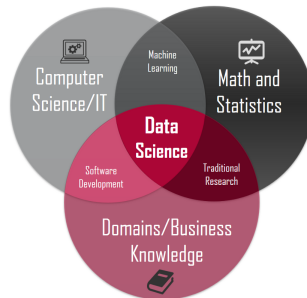
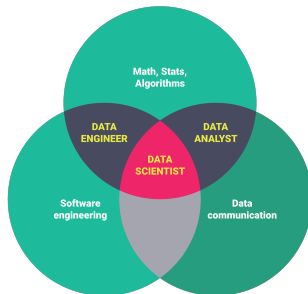
An optimization problem

Yapi Donatien Achou

August 21, 2019



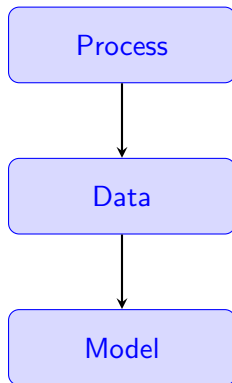
Data science is a multidisciplinary field



Data science optimizes processes



Data science methodology: A data driven modelling



Data science methodology: Process conceptual model



Data science methodology: Data quality and understanding



Data science methodology: Model

- 1 Defect diagnosis
- 2 Asset remaining useful life estimation



Data science in methodology: Analytics at scale



Data science for maintenance optimization

- Part ordering
- Maintenance planing
- Production optimization
- Process optimization
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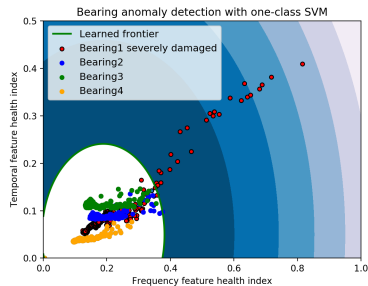
Data science in predictive maintenance: Bearings fault detection



Data science in predictive maintenance: Machine health index



Data science in predictive maintenance: Machine learning



What else?

