Machine Learning Model Life Cycle

Business Question
- What can we do to make it cheaper and faster?
- What kind of savings?
- How can we increase CSAT?

Cross-Validation & Parameter Tuning
- Adjust model parameters
- More Feature Engineering

More Evaluation
- Test on blind hold out dataset
- Test in pre-production

Identify the Problem
- What kind of machine learning problem are we predicting?
- What are the values or categories?
- What are the grouping or rankings?

Choose the Learning Algorithm
- Logistic Regression
- SVM

Online Experimentation
- A/B or Multi-variant Testing
- Online Metrics look good? ✓
- Increase traffic? ✓

Define Success Metrics
- **Offline**: Accuracy, MAE, nDCG
- **Online**: STR, Revenue/User, Bounce Rate

Data & Feature Engineering
- Data we have
- Data we don't have

PROCESS & CLEAN

Release To Production
- Get more data

datasciencedojo
data science for everyone