

MLOps

| Why?

- ▼ ML as reach its maturity in enterprise
- ▼ ML is complexe and involve lot of different profil
- ▼ Hard do put ML model in production

| Who can benefit from ML Ops?

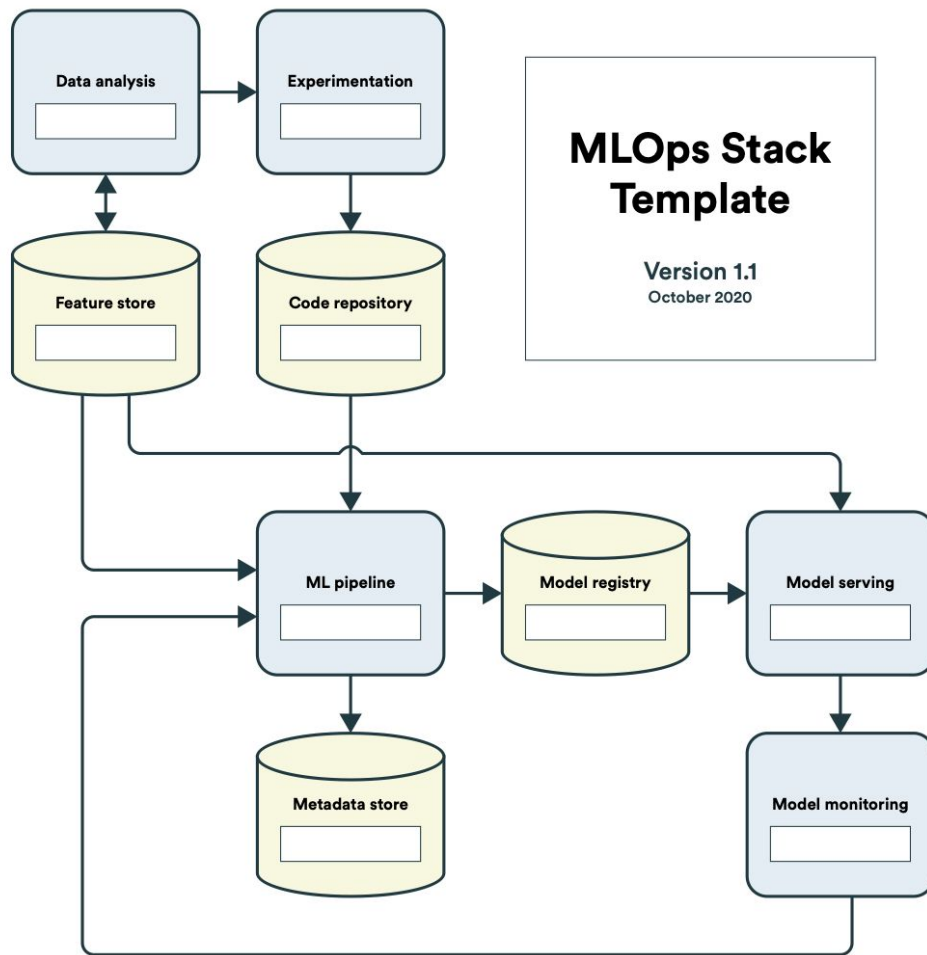
- ▼ Subject Matter Expert
- ▼ Data Scientist
- ▼ Data Engineers / ML Engineer
- ▼ ~~DevOps~~ Site Reliability Engineer
- ▼ Software Engineers
- ▼ Every person involved in an ML project

| What's ML-Ops

- ▼ Methodology
- ▼ DevOps for ML
- ▼ ML life cycle management
- ▼ Automate ML deployment
- ▼ Model Monitoring
- ▼ Automate ML update

| Example of question when using MLOps

- ▼ How often should models be retrained?
- ▼ What governance the organization needs?
- ▼ Are my data biased?
- ▼ What's in my ML artifact?
- ▼ Do we need to understand the model Decision?
- ▼ How many prediction do my model need to make per second?
- ▼ Do I have legal constraint? (GDPR, Financial Decision, ...)
- ▼ What if my model make bad predictions?



Component

Data analysis

Experimentation

Feature store

Code repository

ML pipeline

Metadata store

Model registry

Model serving

Model monitoring

I want More

- ▼ Introducing MLOps (o'reilly)
- ▼ [ML-Ops](#)
- ▼ [CD4ML](#) (Martin Fowler)