



Dagster Deep Dive

Accelerating MLOps Maturity with Neurospace

June 10, 2025

Speakers



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Neurospace

Company facts

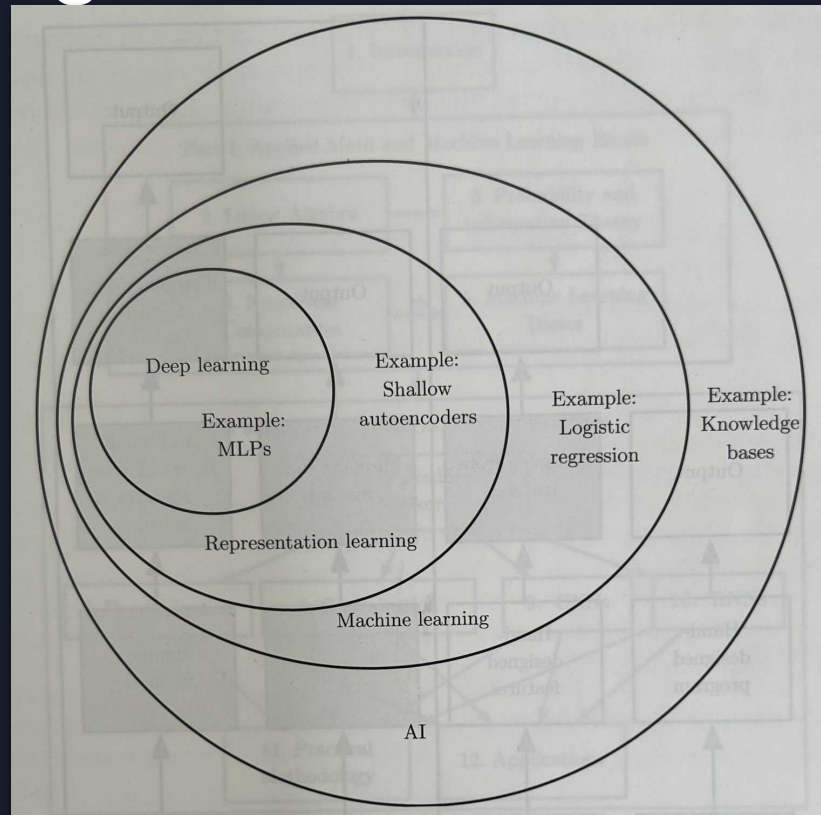


- Neurospace is a Danish based company and experts in Data and ML
- Started in 2018 with the vision of optimizing industrial processes using Data and ML
- We are a Dagster Partner
- Our core competencies include ML, MLOps, Data Platform
- We also offer EU AI act consultancy
- 10 X security (DevSecOps)

What is Machine Learning?

Depends on who you ask

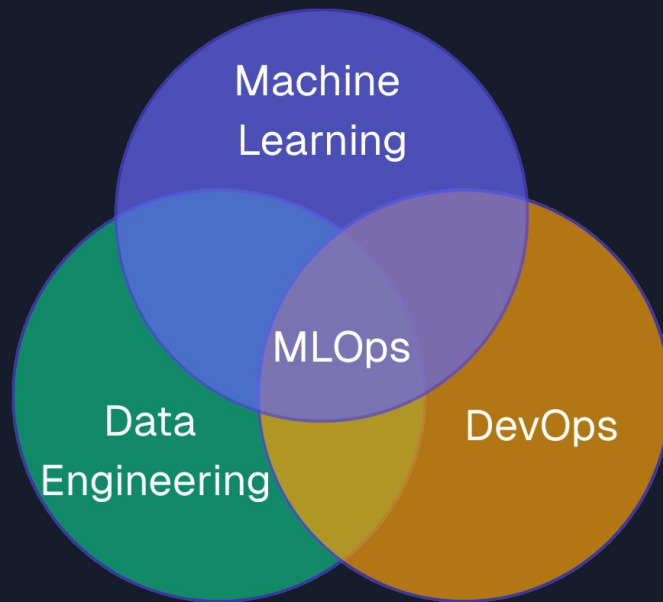
- Is a Linear Regression ML?
- Supervised vs Unsupervised Vs Reinforcement
- What about AI?



What is MLOps?

Just put the Jupyter Notebook in Prod

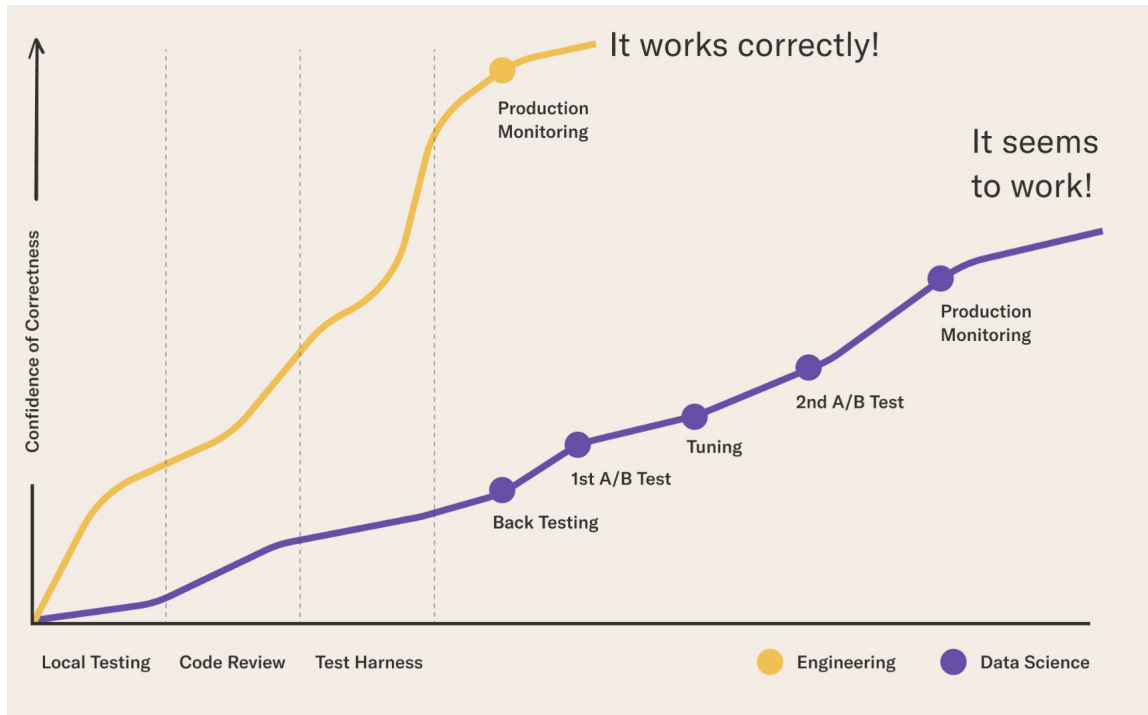
- CI/CD
- Monitoring & Observability
- Model Lifecycle Management



ML Workloads

Flexibility and Experimentation

- Iterative Workflows
- Entropy
- Compute Complexity
- Validation during production (model slippage)



Blurred Lines

Everyone is a Generalist these days

- The boundaries are fuzzy between roles.
- The virtue of unblocking yourself.
- You can get pretty far with a good enough solution.



Erik Bernhardsson @bernhardsson · Jul 20

I think this specialization of data teams into 99 different roles (data scientist, data engineer, analytics engineer, ML engineer etc) is generally a bad thing driven by the fact that tools are bad and too hard to use

70

104

804



Erik Bernhardsson
@bernhardsson

Replying to @bernhardsson

Part of this problem is I think because a lot of backend stuff has leaked into the data world (k8s, docker, terraform, etc). The abstraction layers aren't very strong. It's like if you would have to learn how the Linux kernel works in order to build a web app.

10:16 PM · Jul 20, 2021 · Twitter for iPhone

Dagster Machine Learning & AI Integrations



Dagster Best Practices



Code Locations

Separate environments for ML workloads, Different package versions, and computing resources.



Flexibility

Setup your assets to allow for flexible configuration.



Enable your Scientists

Getting that ML notebook into production isn't trivial.



Asset Versioning

Track different model versions performance through run history.

Demo



Compliance with EU Regulations

EU AI Act

The first binding horizontal regulation
on AI

- Address the risk of health, safety, and fundamental rights (discrimination, freedom of expression, GDPR, and privacy)
- Create a market for Responsible AI in EU

UNACCEPTABLE RISK

HIGH RISK

LIMITED RISK

MINIMAL RISK

EU AI Act

Timeline

2025-02:

- Ban of Unacceptable Risk AI Systems
- Requirement of AI Literacy

2025-08

- Guidelines for GPAI (General Purpose AI) models

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2027-08

- High Risk AI Systems

UNACCEPTABLE RISK

HIGH RISK

LIMITED RISK

MINIMAL RISK

High Risk AI Systems

Requirements



Risk Management
System



Data Governance



Technical
Documentation



Quality
Assessment



Transparency



Human Oversight



Accuracy, Robustness,
and Cyber Security



Conformity
Assessment



Registration



Post-Market
Monitoring



High Risk AI Systems

ModelCards



Risk Management
System



Data Governance



Technical
Documentation



Quality
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Transparency



Human Oversight



Accuracy, Robustness,
and Cyber Security



Conformity
Assessment



Registration



Post-Market
Monitoring



Demo Model Cards



High Risk AI Systems

MLOps



Risk Management
System



Data Governance



Technical
Documentation



Quality
Assessment



Transparency



Human Oversight



Accuracy, Robustness,
and Cyber Security



Conformity
Assessment



Registration



Post-Market
Monitoring





Thank you!