Fantastic Beasts and What Do They Do

Pasha Finkelshteyn, 🥑 for Big Data 💻

 is an icon of the Big Data Tools plugin

What is Big Data?

Nobody knows

What is Big Data?

- Doesn't fit a single node
- Scales without rearchitecturing when grows (3V)
  - Volume
  - Velocity
  - Variety
- Enough data to make reliable business decisions

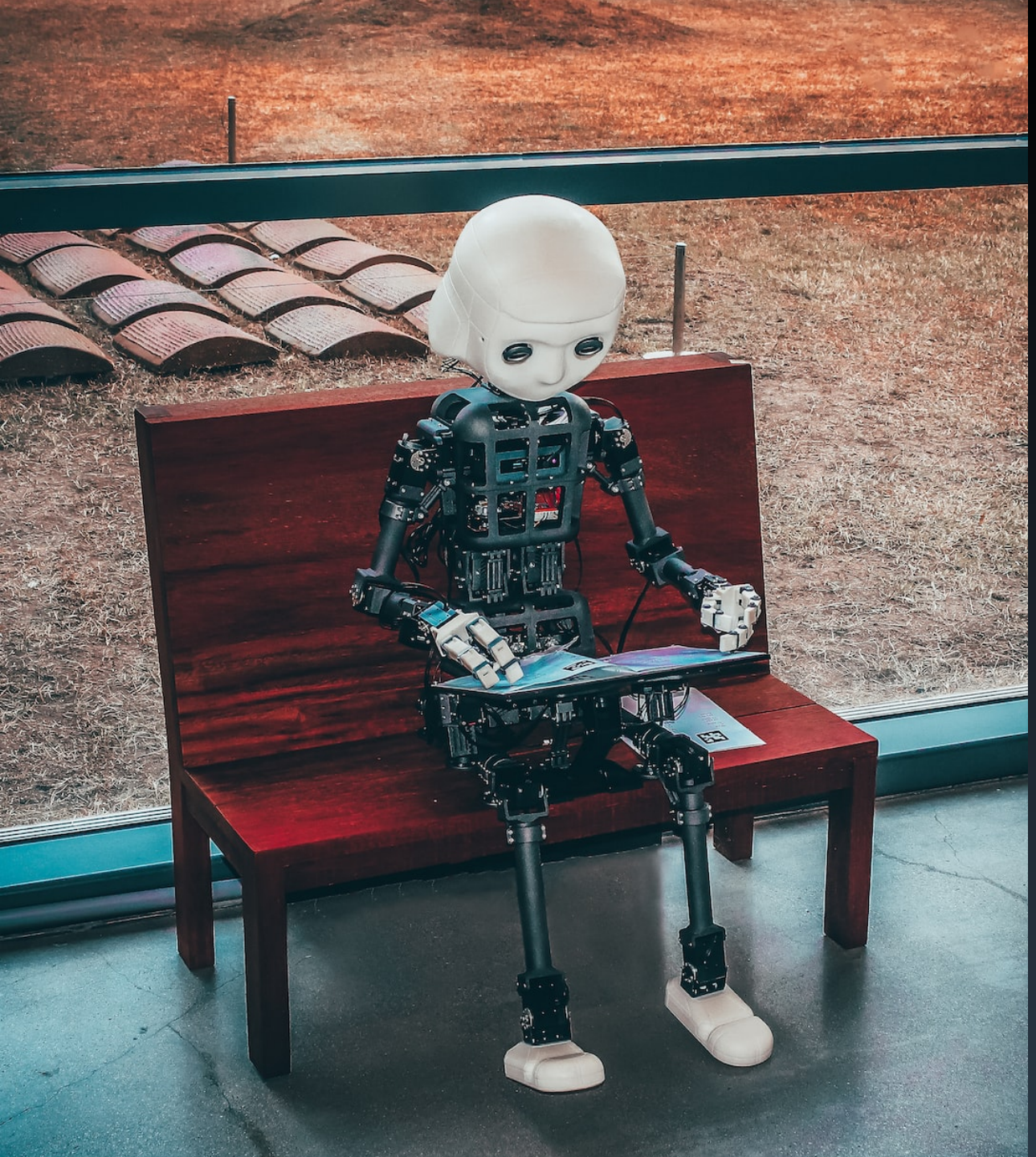

Who handles this data? Data Engineers!

Responsbilities: Pipelines

Transfer data source → sink

Fix (data) leaks

Data engineer is pipeliner and plumbr™ in one



Responsibilities: automation

Work together with SRE, Ops, analysts, DS etc.

Help in automation of chore tasks

Orchestration

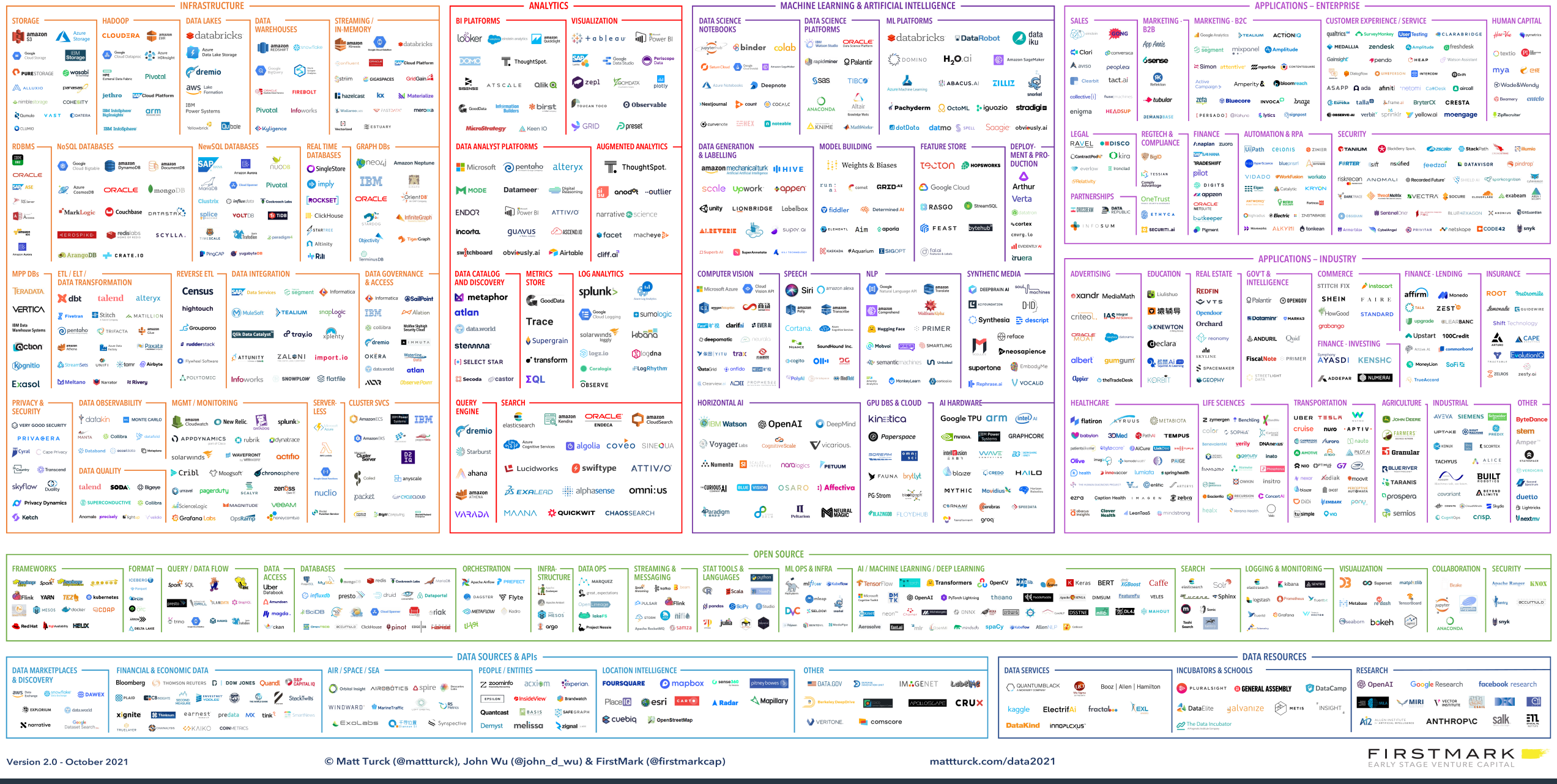
Responsibilities: architecture

Architecture of storage

Architecture of pipelines

Tool selection

MACHINE LEARNING, ARTIFICIAL INTELLIGENCE, AND DATA (MAD) LANDSCAPE 2021



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What languages DEs use?

-  SQL
-  Python
-  Scala
-  Java
-  R

What languages DEs use?

- SQL
- Python
- Scala
- Java
- R

folks, we cover all major languages DEs use!

What languages DEs use?

But also... NoCode/LowCode tools!

height:2em

...and many more

NoCode is so popular that...

At  height:.8em* conference we had a separate talk on hardcore vs "casual" DEs

* I'm a humble member of PC of SmartData

What do fantastic beasts from BDT team do?

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We integrate all the tools we can inside our plugin.

Currently they are:

Distributed computation engine

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Notebooks which allow mix code and its output

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distributed event streaming platform

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Blob storages

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Framework that allows for the distributed processing of large data sets

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Amazon's distribution of Hadoop

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and more

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Why these ⬆️? We believe they're widely used!

Supported functionalities

- Remote (and Local) file systems
- Binary formats view
- Notebook support
- Monitoring support

Remote (and Local) file systems

- Copy-paste
- Rename
- Drag&Drop
- Metainfo show

Binary formats view

- avro
- orc
- parquet

Notebook support

- Zeppelin
- DataBricks (not agreed with them yet)

Why do we need notebook support?

- Autocompletion
- Refactoring

Monitoring support

- Spark
- Hadoop
- Kafka

Kafka

Kafka is WIP, will be released soon.

We've added **producers** and **consumers**

Demo

Thank you!

Try our plugin here: