

# **Data Science terminology diversity**

**Week1**  
Data Science terminology overview  
and Introduction to Python (Part I)

Middlesex University Dubai: Winter22  
CST4050; Instructor: Dr. Ivan Reznikov

# Machine Learning vs AI



**Mat Velloso** @matvelloso · Nov 22

Difference between machine learning and **AI**:

If it is written in Python, it's probably machine learning

If it is written in **PowerPoint**, it's probably **AI**

166

6.6K

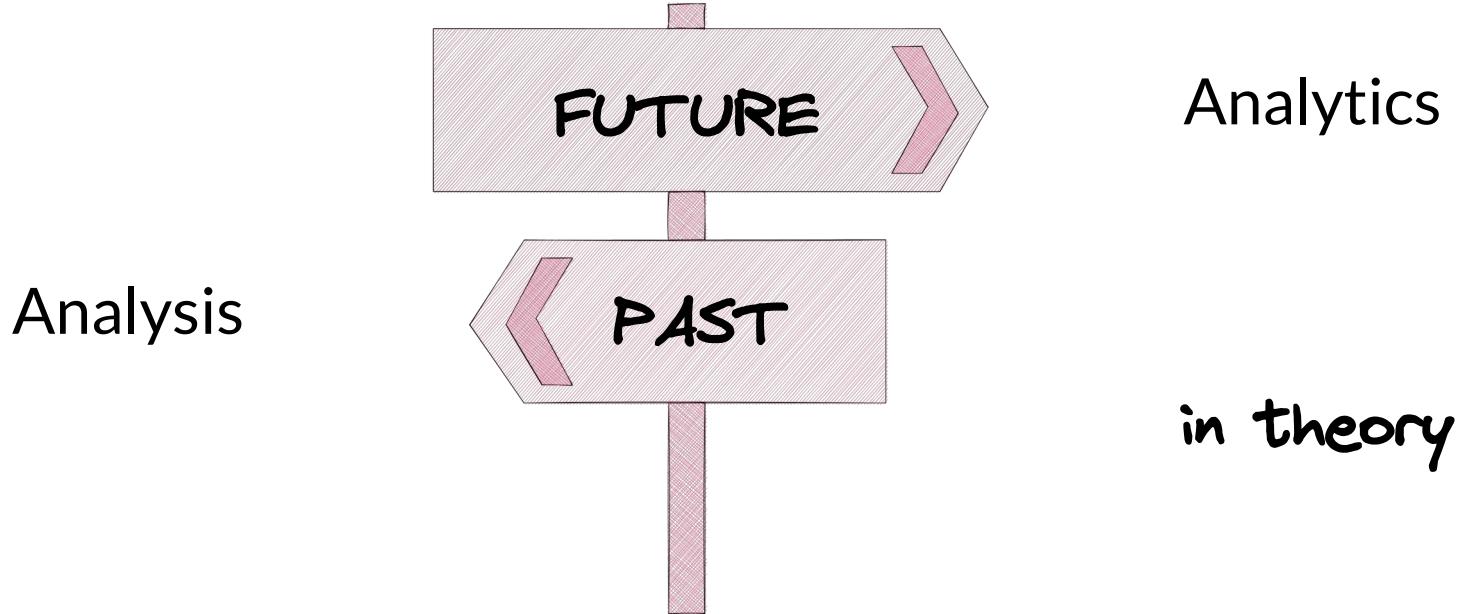
19K



Show this thread

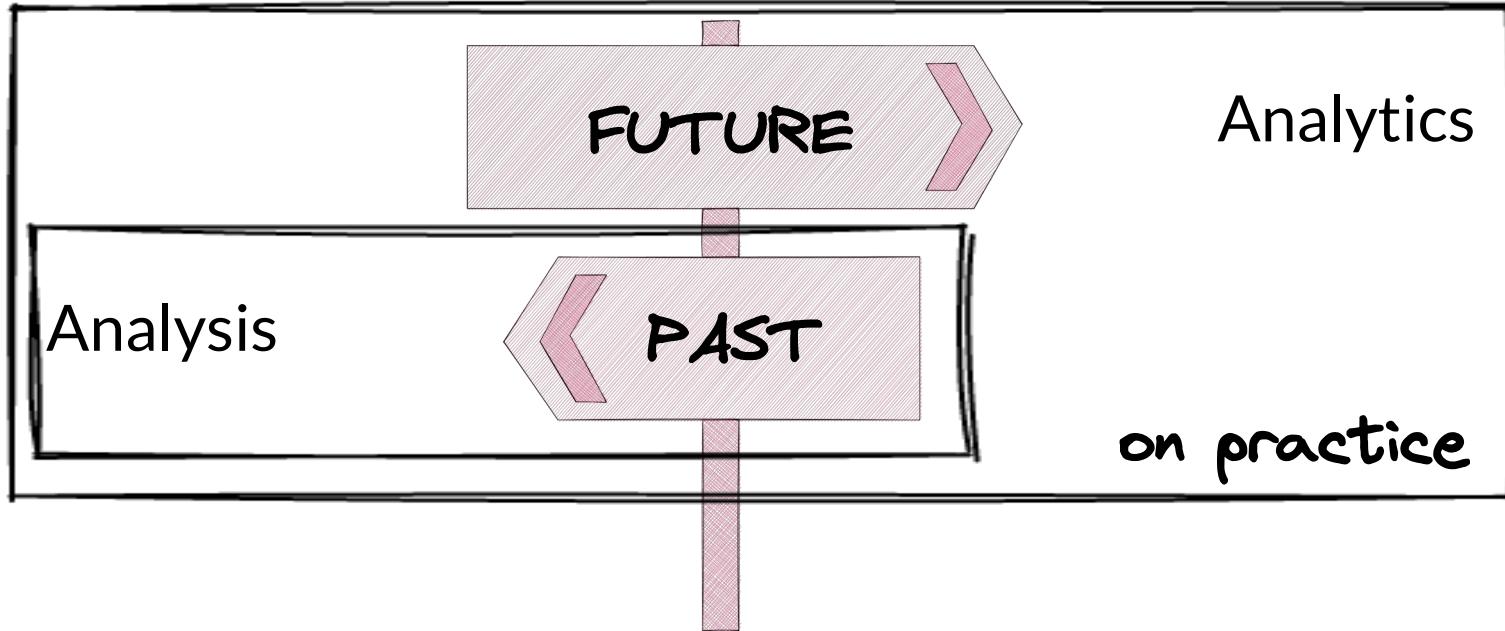
Jokes aside, nowadays, it's sometimes quite hard to distinguish Machine Learning terminology

# Data Science vs All: Terminology



Data Analysis  $\neq$  Data Analytics  
Business Analysis  $\neq$  Business Analytics  
... Analysis  $\neq$  ... Analytics

# Data Science vs All: Terminology



Data Analysis  $\neq$  Data Analytics  
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# Data Science vs All: Terminology

## Qualitative

Trees are green  
Different heights  
Pine needles smell

Most forests are located in Europe



## Quantitative

10 trees  
6 trees are same  
Trees height range from X to Y m.

Forest takes around 38% of habitable land

We will operate with Q|Q terminology in the future slides

# Data Science vs All: Terminology

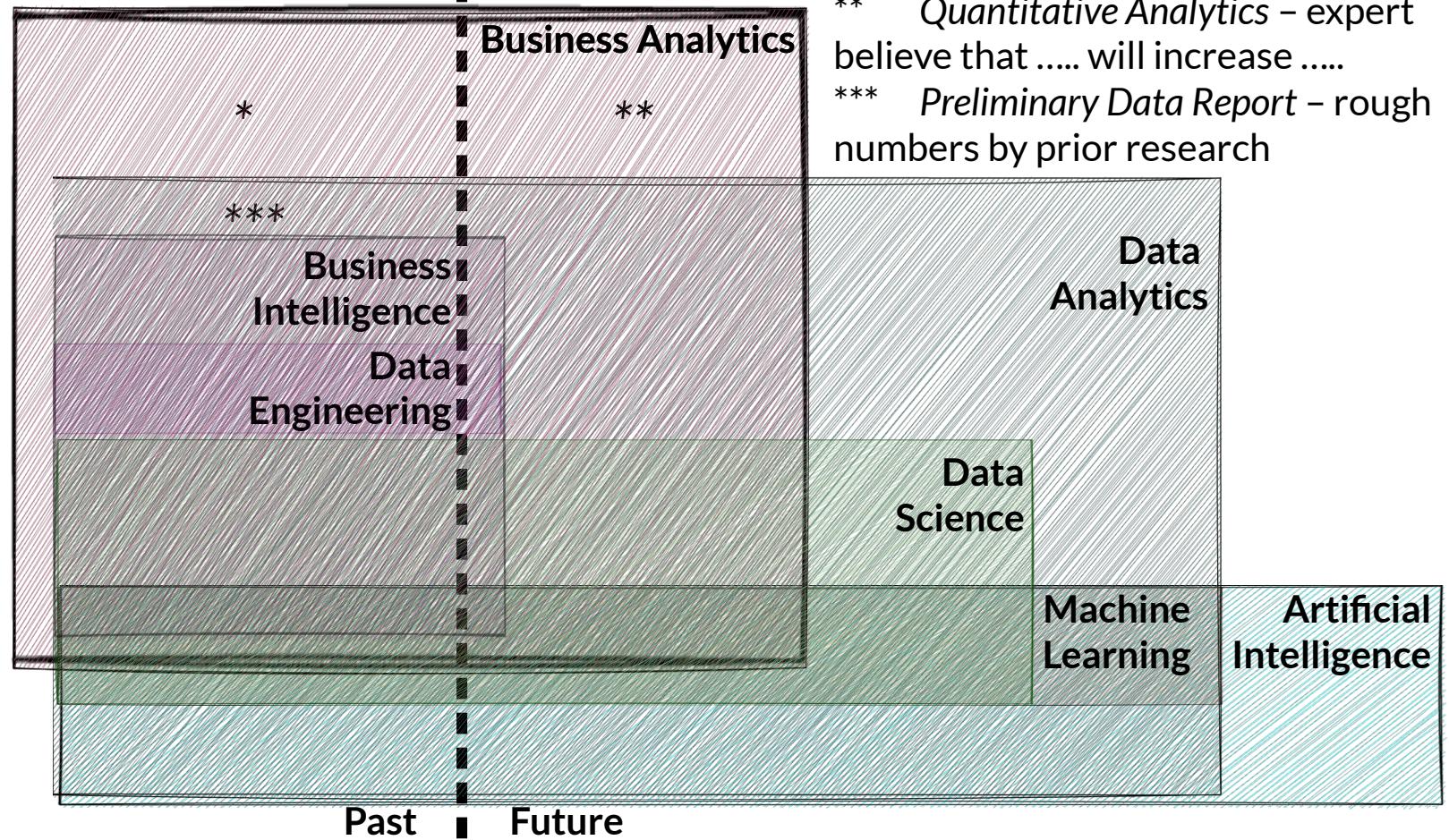
The next couple of slides will be dedicated to understanding the overlapping of the following terms:

- Business Analytics
- Data Analytics
- Data Science
- Data Engineering
- Machine Learning
- Business Intelligence
- Artificial Intelligence

Some may have seen other representations – probably because nowadays, there is no absolute truth on what each term means, as the field is rapidly changing.

# Data Science vs All

**Business Analytics**  
Data Analytics  
Data Science  
Data Engineering  
Machine Learning  
Business Intelligence  
Artificial Intelligence

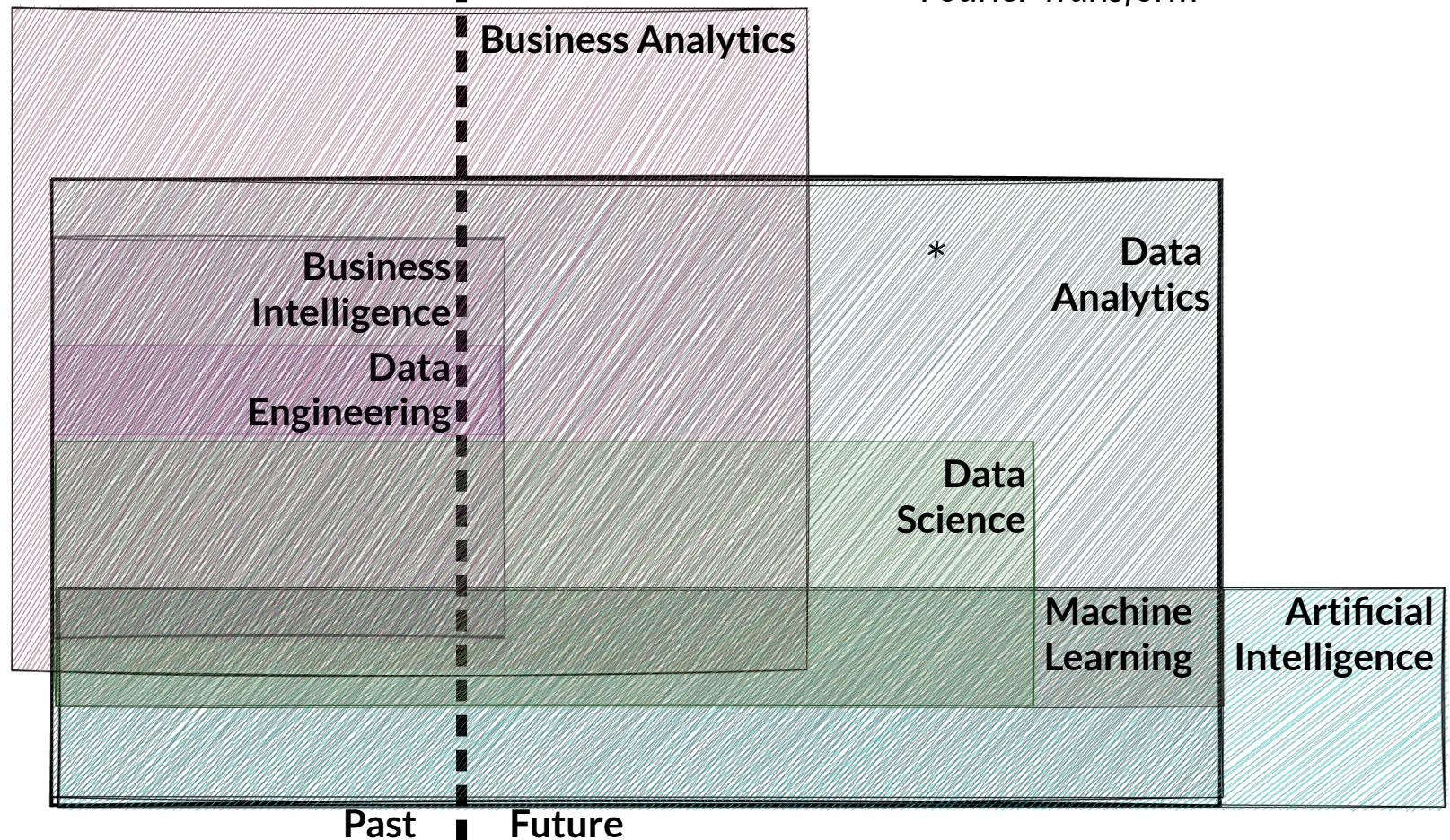


# Data Science vs All

\*

Signal Processing,  
Fourier Transform

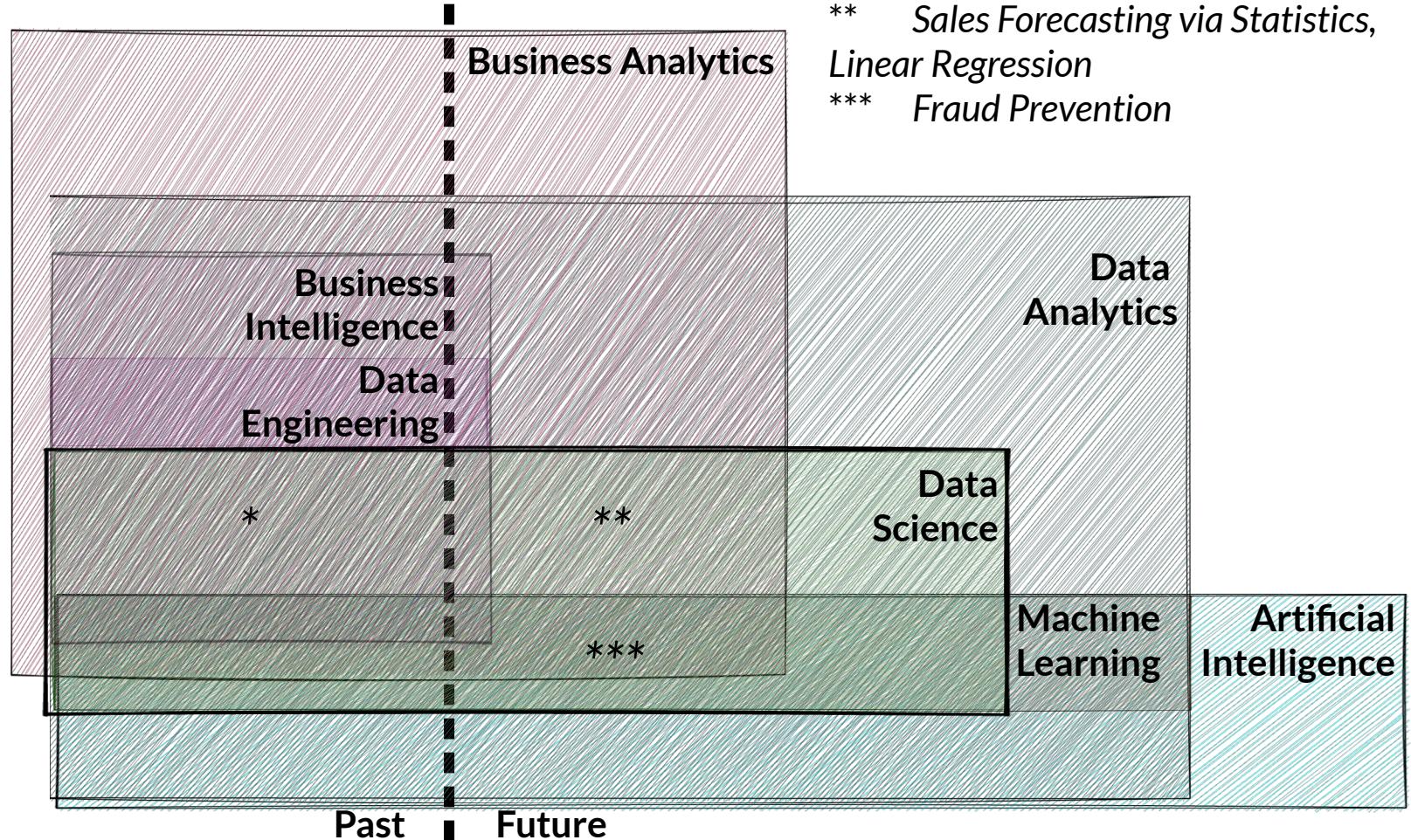
Business Analytics  
**Data Analytics**  
Data Science  
Data Engineering  
Machine Learning  
Business Intelligence  
Artificial Intelligence



# Data Science vs All

Business Analytics  
Data Analytics  
**Data Science**  
Data Engineering  
Machine Learning  
Business  
Intelligence  
Artificial  
Intelligence

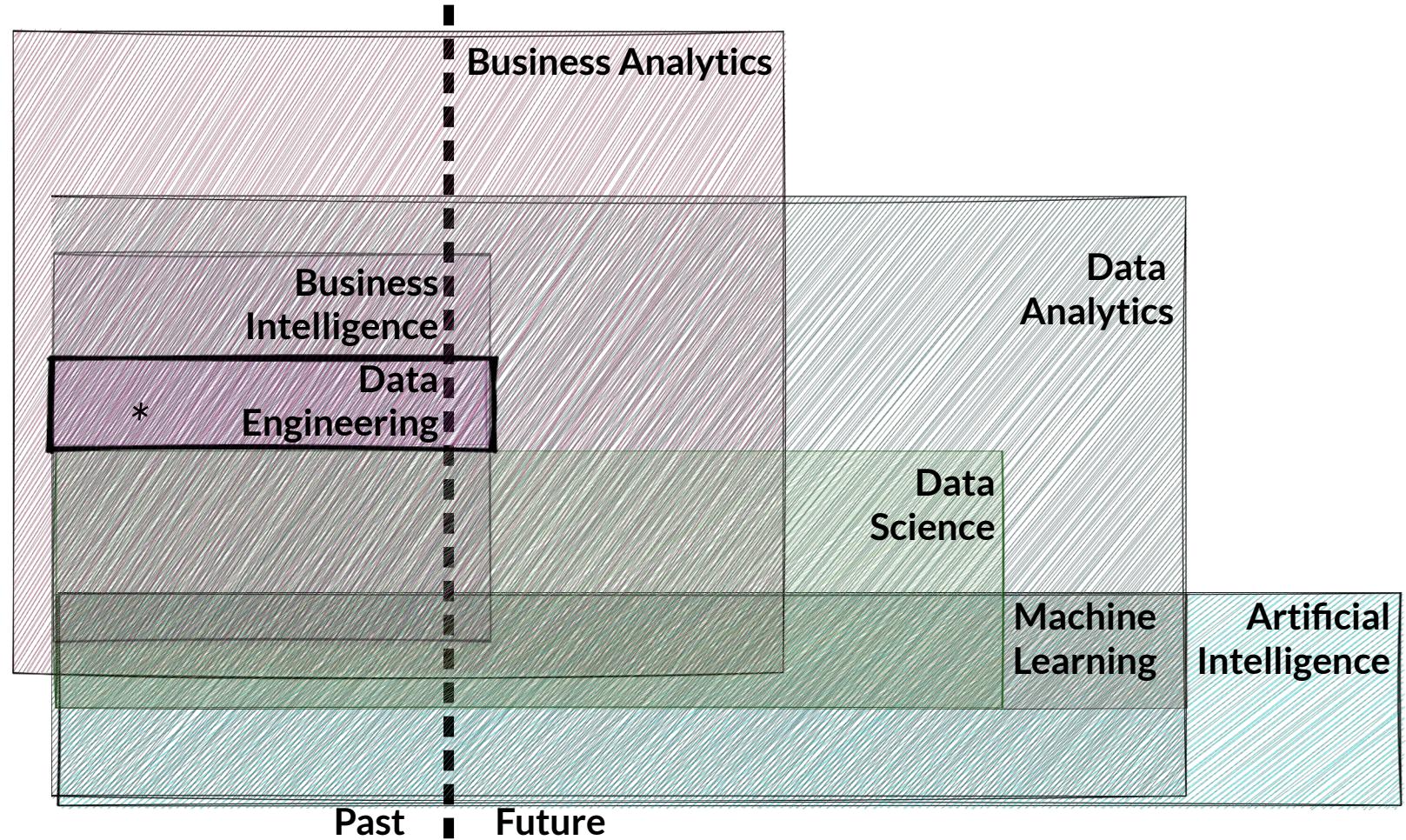
- \* Dashboards and Reporting Visuals
- \*\* Sales Forecasting via Statistics,  
Linear Regression
- \*\*\* Fraud Prevention



# Data Science vs All

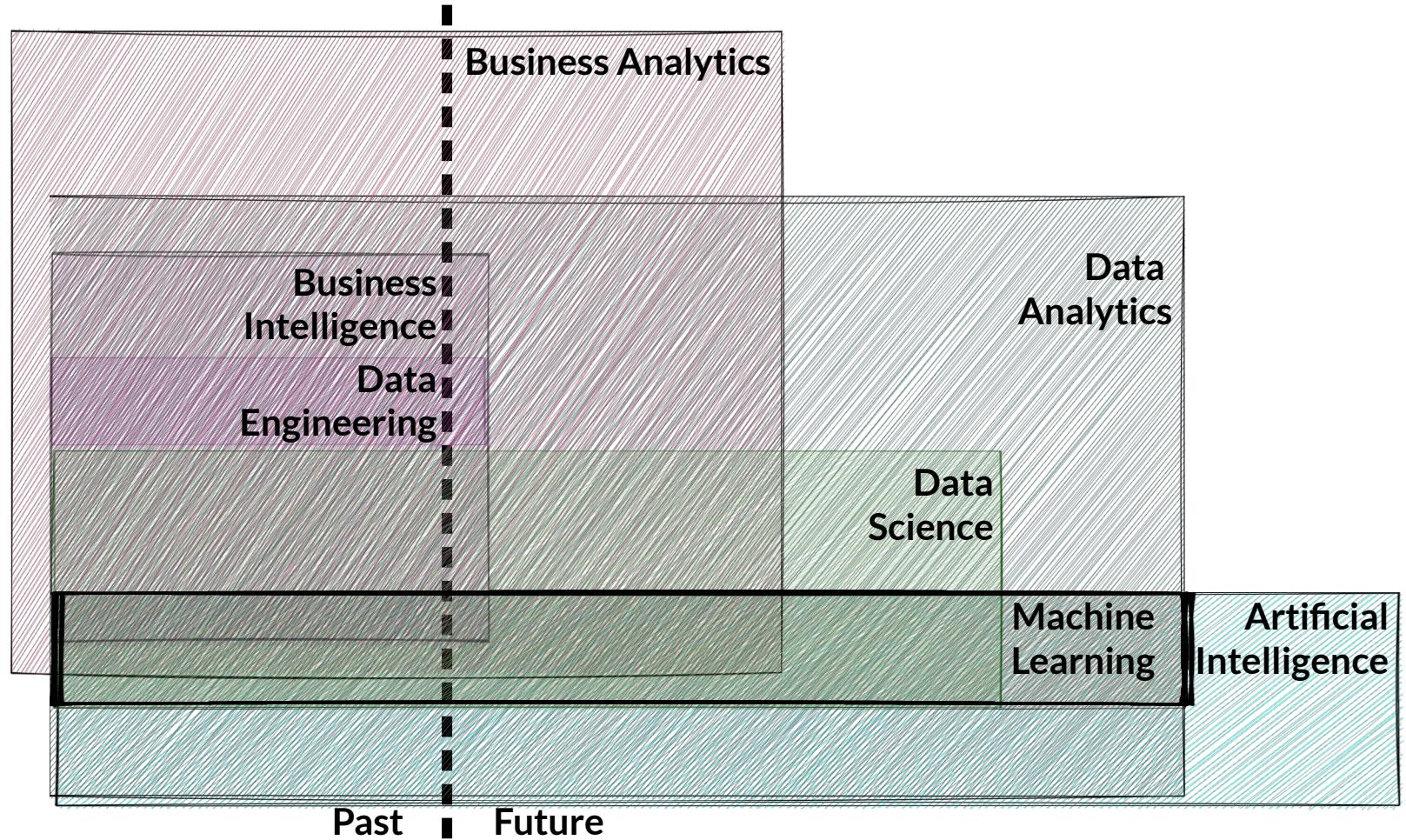
\* *Data Systematization*

Business Analytics  
Data Analytics  
Data Science  
**Data Engineering**  
Machine Learning  
Business  
Intelligence  
Artificial  
Intelligence



# Data Science vs All

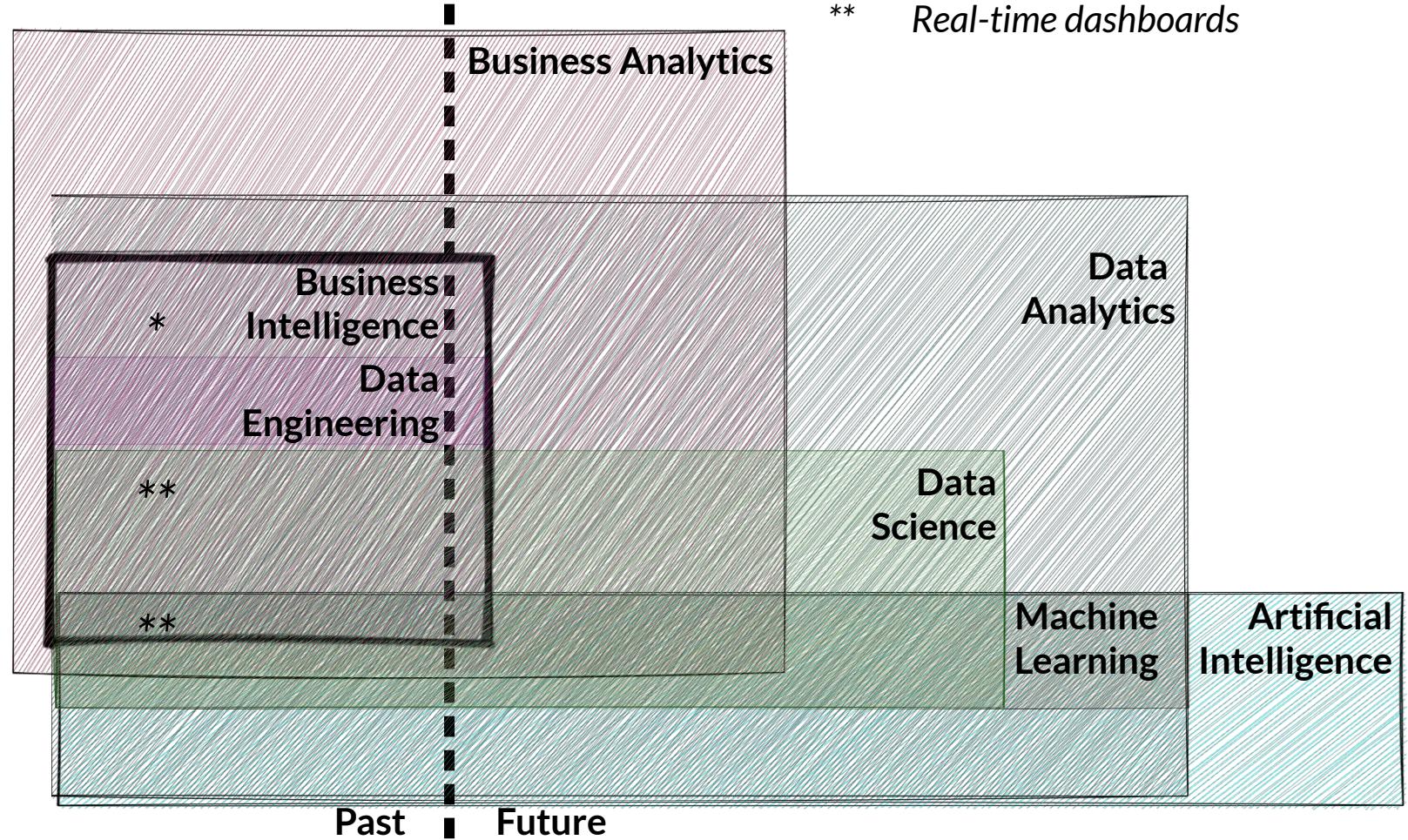
Business Analytics  
Data Analytics  
Data Science  
Data Engineering  
**Machine Learning**  
Business  
Intelligence  
Artificial  
Intelligence



# Data Science vs All

Business Analytics  
Data Analytics  
Data Science  
Data Engineering  
Machine Learning  
**Business Intelligence**  
Artificial Intelligence

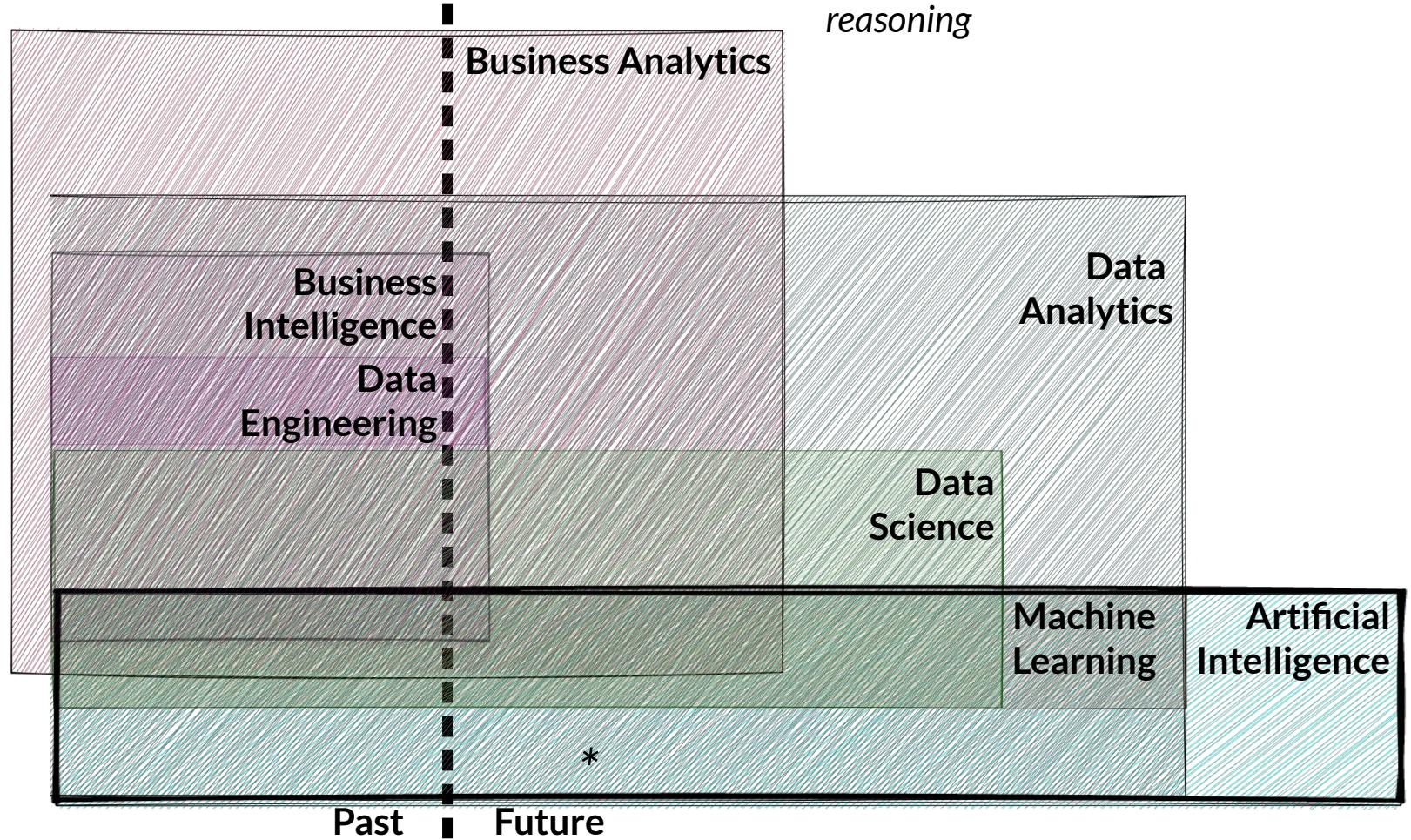
\* Reporting  
\*\* Real-time dashboards



# Data Science vs All

Business Analytics  
Data Analytics  
Data Science  
Data Engineering  
Machine Learning  
Business  
Intelligence  
**Artificial  
Intelligence**

\* Knowledge modelling, symbolic reasoning



# Data Science vs All

Sweet spot

Business Analytics  
Data Analytics  
Data Science  
Data Engineering  
Machine Learning  
Business  
Intelligence  
Artificial  
Intelligence

