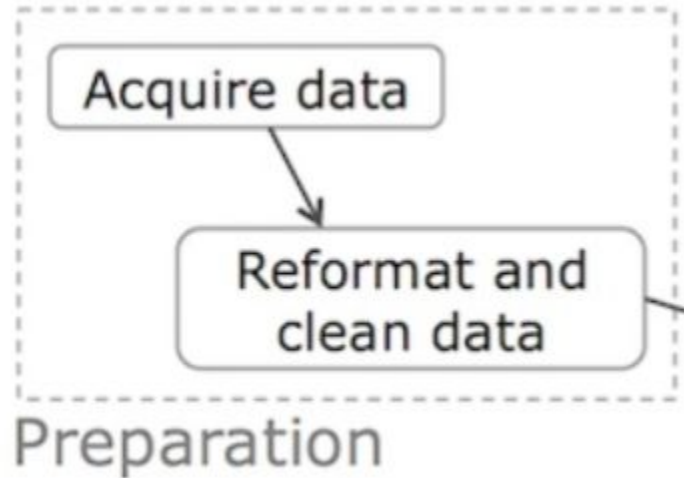

Real World Applications of Data Science

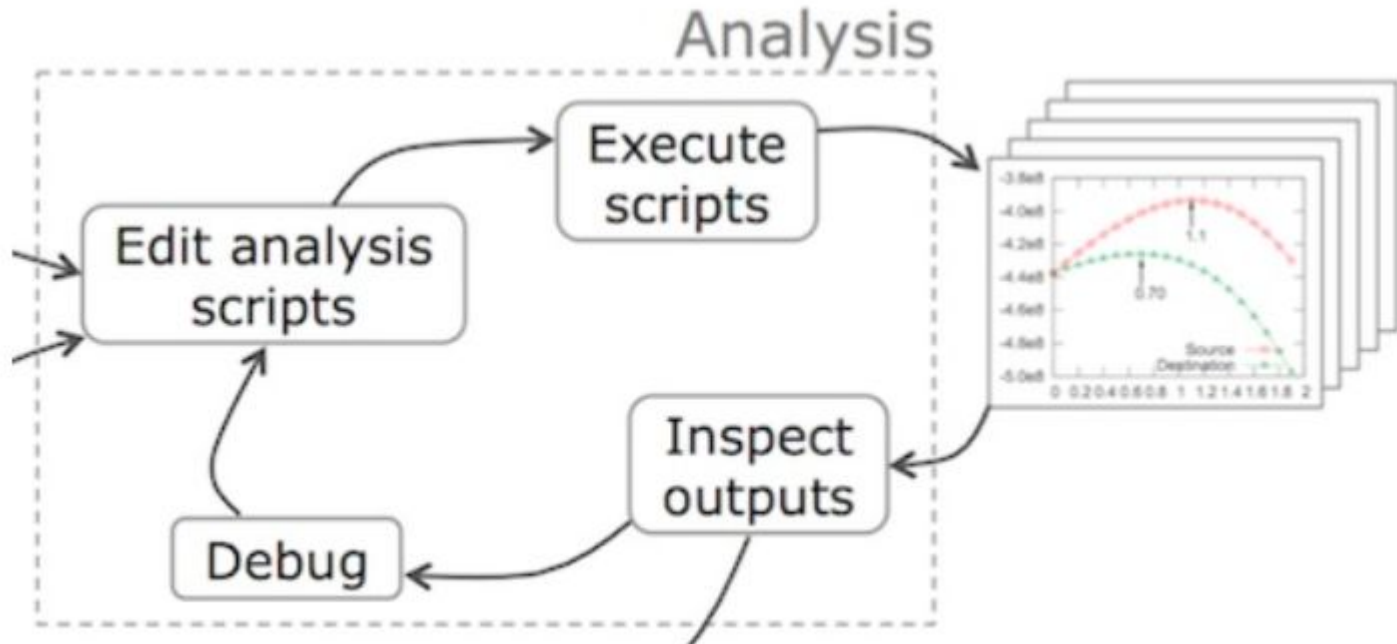
In partnership with:
Proscia Inc, Betamore, Spark B-more

Course Recap

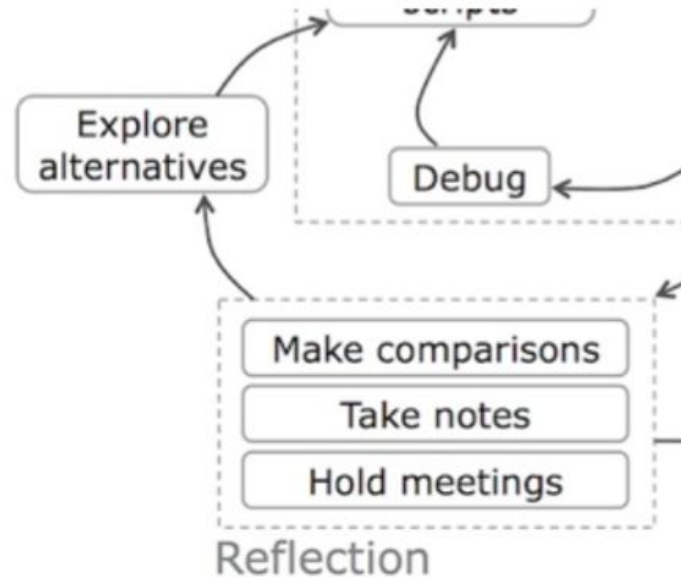
The Data Science Workflow



The Data Science Workflow



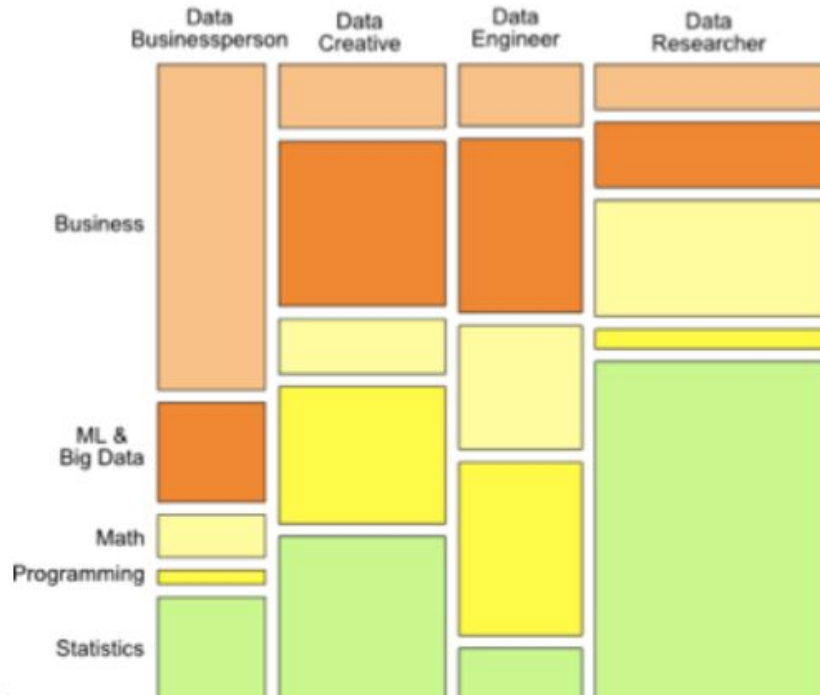
The Data Science Workflow



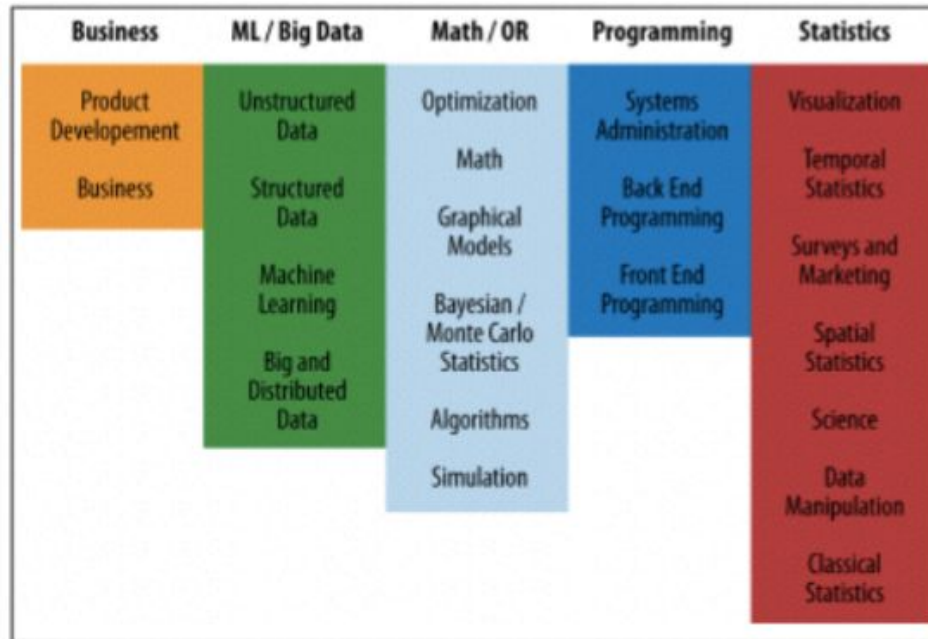
The Data Science Workflow

Data Developer	Developer	Engineer	
Data Researcher	Researcher	Scientist	Statistician
Data Creative	Jack of All Trades	Artist	Hacker
Data Businessperson	Leader	Businessperson	Entrepreneur

The Data Science Workflow



The Data Science Workflow



Further topics

Data Visualization

- [FlowingData](#)
 - [plot.ly](#)
 - [Grammar of Graphics](#)
 - [D3.js](#)
 - [Tableau](#)
-

Further topics

Data Processing

- Command line tools
 - Connecting Python and the database
-

Further topics

Statistics

- Experimental design
 - Monte Carlo simulation
 - Causality testing
-

Further topics

Learning methods

- Neural Networks
 - Support Vector Machines
 - Latent variable models
 - Non-linear dimensionality reduction/Manifold learning
 - Recommender systems/Collaborative filtering
 - Outlier detection
-

Further topics

Other Languages

- **R:** For the latest statistical models, better visualization
 - **Julia:** Faster combination of R + Python (very new)
 - **Scala:** Many utilities for Hadoop and Spark
-

It's been a pleasure!
