

# Agile Data Science

Master in Foundations in Data Science

FALL 2023

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### Basic Information



#### DATES:

- Thursday: 14h-16h
- Friday: 14h-16h



#### LOCATION:

• T1 classroom

#### MAIL:



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- enrique.Mora@es.nestle.com

# Prerequisites

programming experience in PYTHON.

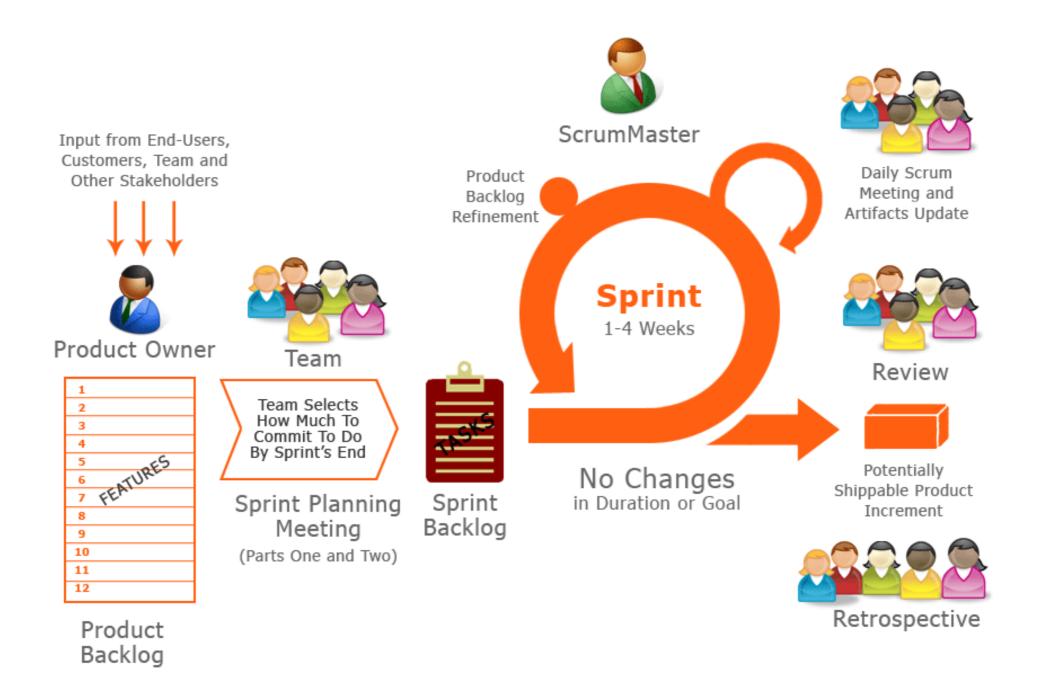


### Goals



1. Practice agile methodologies for Data Science applications.

# Agile Methodologies

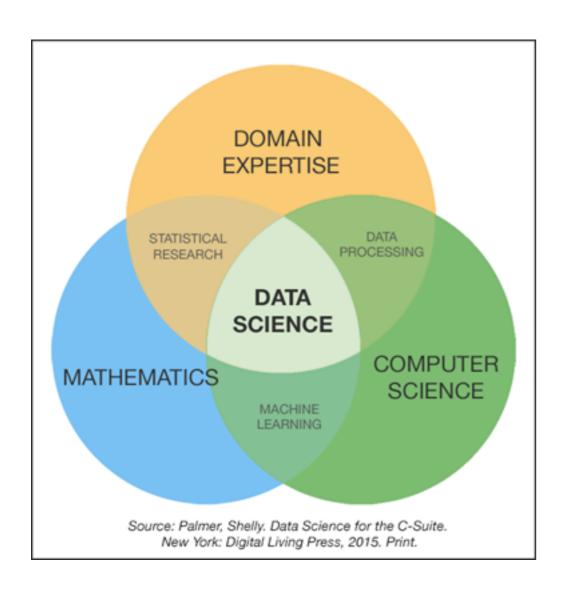


#### Goals



- 1. Practice agile methodologies for Data Science applications.
- 2. Learn about what it's like to be in a Data Science team.

### Data Science Team



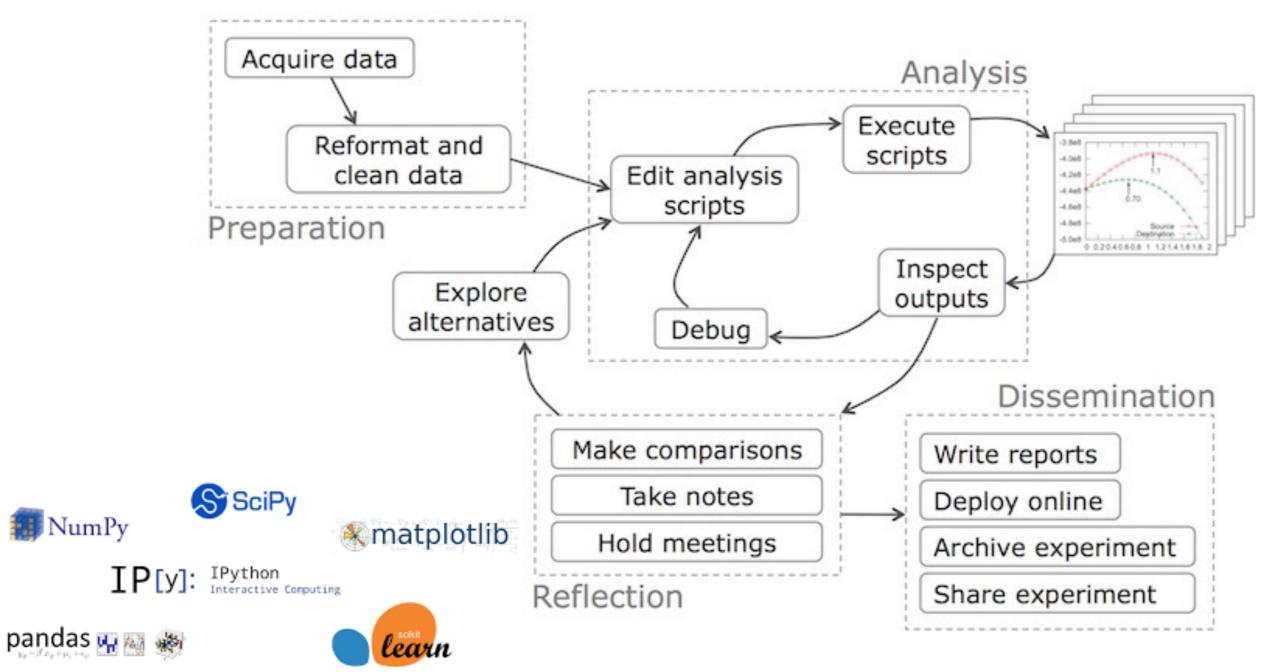


### Goals



- 1. Practice agile methodologies for Data Science applications.
- 2. Learn about what it's like to be in a Data Science team.
- 3. Learn about data science workflow

## Data Science workflow



# Course Topics

Topic
Introduction to Data Science
Agile Software Development Methodologies
Data Science Workflow: Setting up Data Science Infrastructure
Data Science Workflow: Data Preparation
Data Science Workflow: Analysis
Data Science Workflow: Dissemination and Deployment

# Course Grading



90% Agile Data Science Project

10% Participation and Attendance

# Bibliography

- Clean Code: A Handbook of Agile Software Craftsmanship.
  ( Prentice Hall) Robert C. Martin
- 2. Data Science from Scratch: First principles with Python. (O'Reilly) *Joel Grus*
- 3. Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython. (O'Reilly) Wes McKinney
- 4. Doing Data Science: Straight Talk from the Frontline. (O'Reilly) Cathy O'Neil, Rachel Schutt
- 5. Python Data Science Handbook: Tools and Techniques for Developers. (O'Reilly) Jake VanderPlas
- 6. Practical MLOps: Operationalizing Machine Learning Models. (O'Reilly) Noah Gift, Alfredo Deza