

# Rosa Filgueira

## Background:

- **PhD Computer Science** - University Carlos III – **HPC Research**
  - Dynamic optimization techniques for MPI-based applications
- 5 years as a **Postdoc** – University of Edinburgh – **Data Intensive Research**
  - Research activities in Scientific Workflows & Gateways, and Data-Intensive methods. Work in several UK & EU project funded
    - e.g. VERCE and REAR (Amy!)
- 2 years as a **Senior Data Scientist** – BGS – **Geoscience Domains**
  - Data gathering, cleaning, filtering, analysis
  - Parallelisation/optimization of applications
  - Promoting scientific workflows, data-frameworks, containers and reproducibility tools, etc.

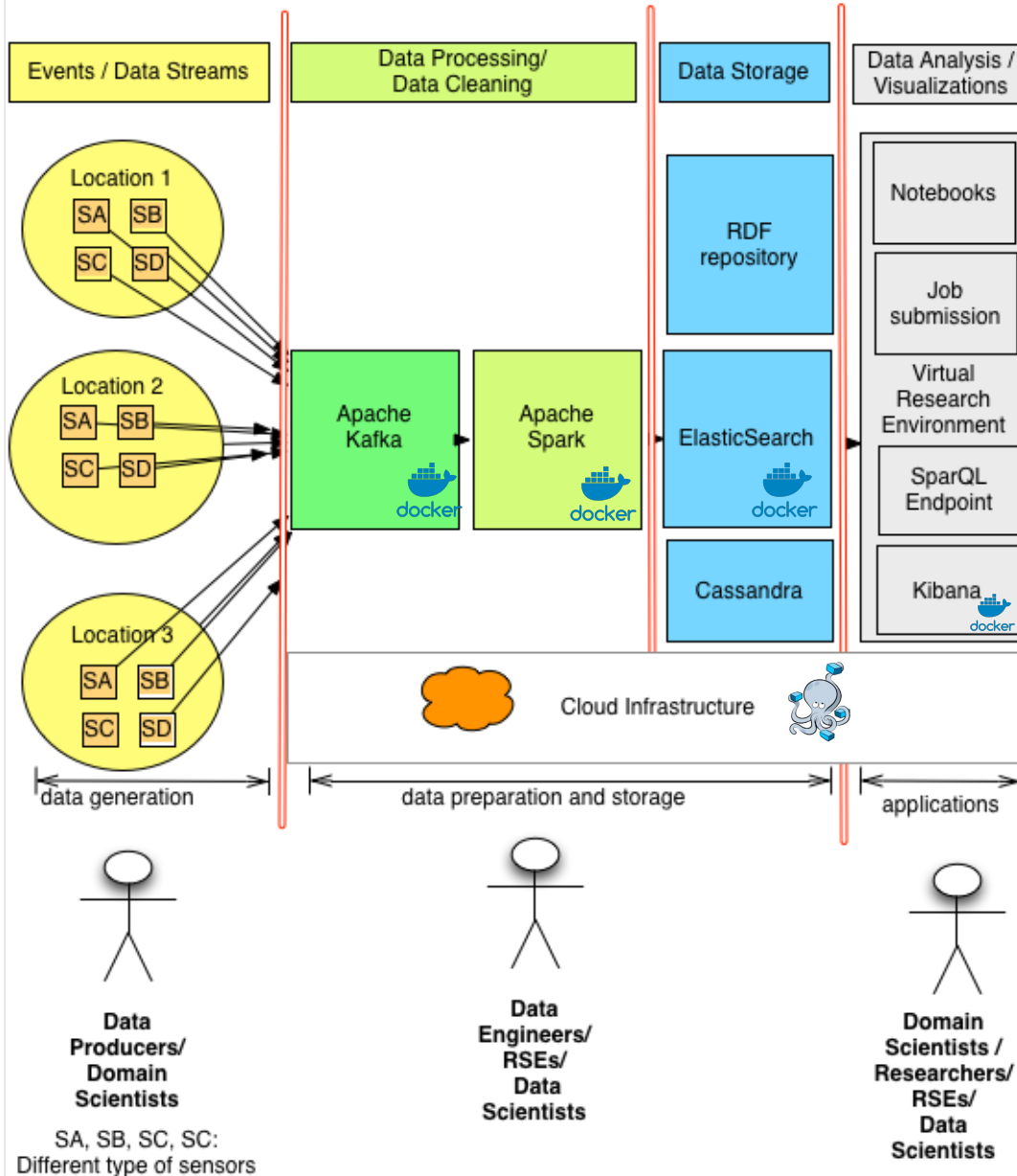
## Currently (started two weeks ago!):

- **Data Architect** – EPCC, University of Edinburgh – **Multiple Domains**
  - Focused in data-intensive architectural challenges





Example of a **Data Architecture** for analysing real-time data:  
How different **roles** can interact at every stage of the **data lifecycle**



Environmental monitoring example

- Datasets:

- [Water quality](#)
- [Seismicity](#)
- [Atmospheric composition](#)

- Multiple locations & data types in real-time

- Roles with **different** set of **skills/expertise**

- Roles **interact** with datasets in different ways: **different needs / interests / frameworks/ computing languages & resources**

- **Communications/Collaborations** between those roles **are essential**