

# Introductions.

*Or, what a recovering astrophysicist is doing talking to me about “Big Data”*

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Introduction to Big Data & Data Engineering - April 2023

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# Contents

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- Who am I and why am I instructing you at this workshop?
- Aims & Objectives
- How are we going to achieve them?
- Rules of Engagement
- Time to introduce yourselves!

# Adam Hill

Who am I?

**COMPLY ADVANTAGE** Senior Data Scientist



Lead Data Scientist

Day Job

Charity

**DataKind volunteer**

DataDive volunteer;  
Data Ambassador;  
Committee member



**DataKind**

**Former Royal Society  
Entrepreneur in Residence**

Recovering astrophysicist

Evangelist

Me

**Find me at**

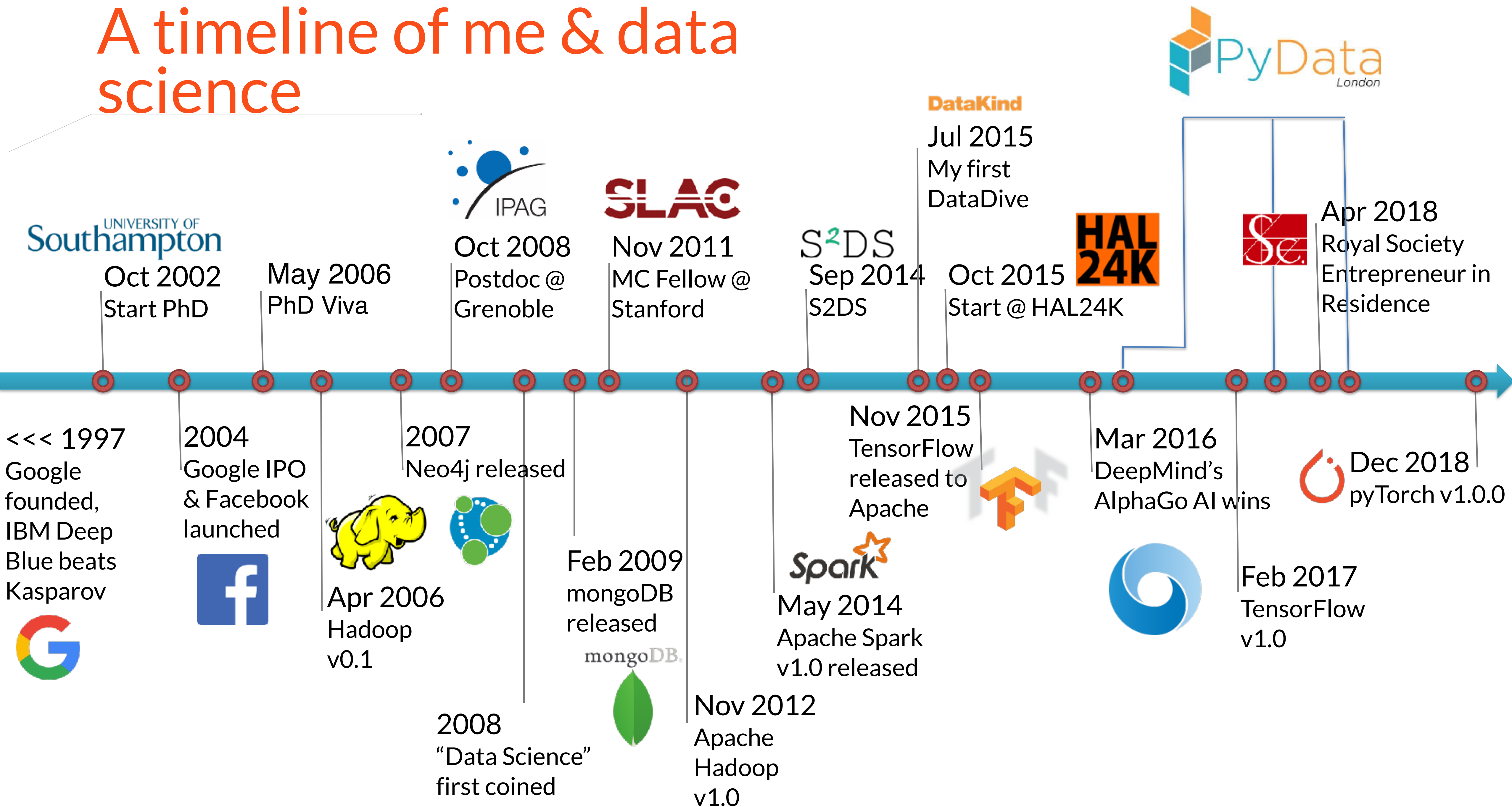
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[Horsewithapointyhat.com](http://Horsewithapointyhat.com)



# A timeline of me & data science





# Success #1: Southampton DataDive

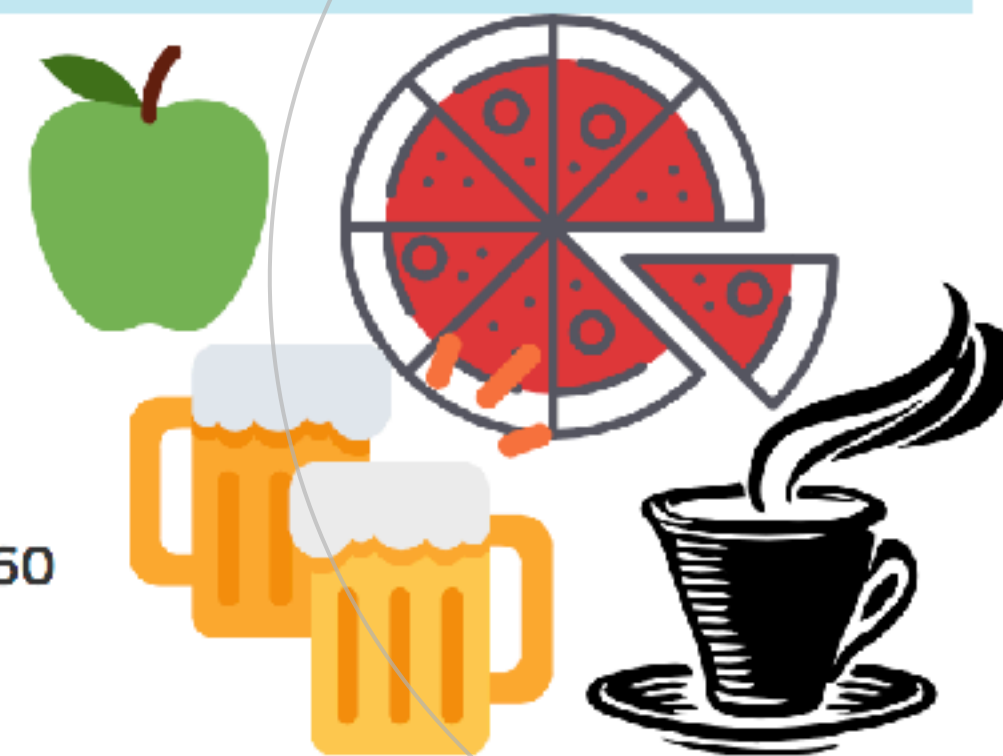


## PARTICIPANTS

- 90 people were involved over the two days
- 60 scientists & analysts from the uni & ONS
  - 9 charity reps
  - 5 DataKind volunteers

## FUEL

- 50 litres of soft drinks
- 1 kg of coffee
- 25 x 15" pizzas
- 64 litres of beer
- 60 apples, 100 bananas, 30 grapes punnets & 60 satsumas
- A lot of pasta, sandwiches & snacks



**PARKINSON'S<sup>UK</sup>**  
**CHANGE ATTITUDES.**  
**FIND A CURE.**  
**JOIN US.**



*"The DataDive was a really valuable experience for Shelter. We learned a lot about new tools and techniques and different ways to look at modelling housing and homelessness risk across the UK. Shelter launched our new strategy this week and this work is really important for us as part of defining new ways of tackling the housing emergency. We will be building on the outputs from the DataDive to develop our approach to modelling housing need in the UK, and to help shape Shelter's engagement with local housing issues over the coming years."* - **Hester Steedman Thake, Shelter**

# Aims & Objectives

- We will touch on the principles of big data
- Explore some of the tools and technologies that are out there, e.g.
  - Docker
  - Apache Spark
  - NoSQL databases
  - Data streaming
- Get hands on with these tools and try and build something together!
- While I want this to be a practical introduction remember this is “an introduction” and these tools and technologies sit in a wider context



# How will we do this?

- A mixture of lectures and practical labs.
- Lectures will try and provide background and wider context
- Labs will be based on specific technologies with the purpose of demonstrating the principles.
- Some of the labs sessions will be dynamic and delivered as a live coding session where we work together.
- Other parts of the labs you will pair up and work on trying to tackle a problem yourselves.

# Rules of Engagement

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Ask questions as we go!

- The class is meant to be interactive, please don't wait until the end to ask or raise concerns.
- We are working virtually so please try not to talk over each other, use the hand-up option in Zoom if needed.



# Let's get to know each other!

Everyone has 90 seconds to:

- Introduce themselves
- Say where they are from
- What their PhD topic is
- What they hope to get from this workshop



# Questions

A thin grey line that starts at the left edge of the slide, goes diagonally up to the right, then horizontally to the right, ending under the word 'Questions'.

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