Sumatra as an Open Science tool

Presented by

Felix Hoffmann

@Felix11H

felix11h.github.io/

Slides

Slideshare:
tiny.cc/opencon-smt

Source:
tiny.cc/github-slides

Resources on Sumatra

Website:
neuralensemble.org/sumatra/

Getting started:
packages.python.org/Sumatra/

Repository:
bitbucket.org/apdavison/sumatra/

Mailinglist:
tiny.cc/smt-user

Maintainer: Andrew Davison

Spectrum of Reproducibility

... in Computational Research

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reproduction from
descriptions in
research article

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Tough!

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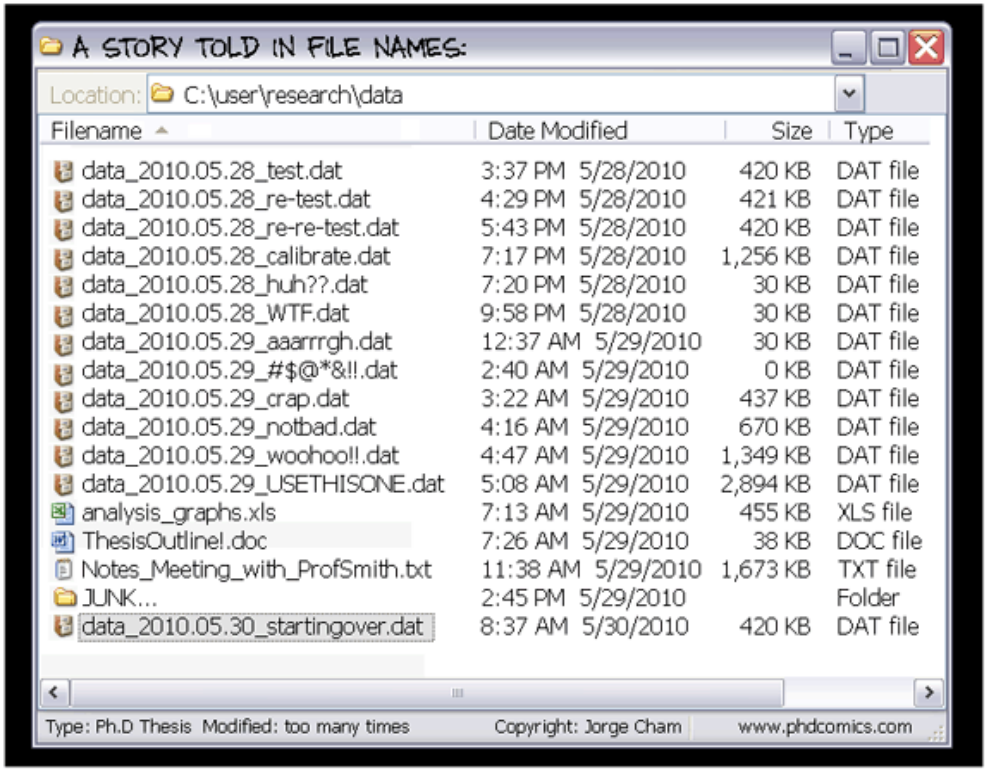
The problems...

Which version of my code did I use?

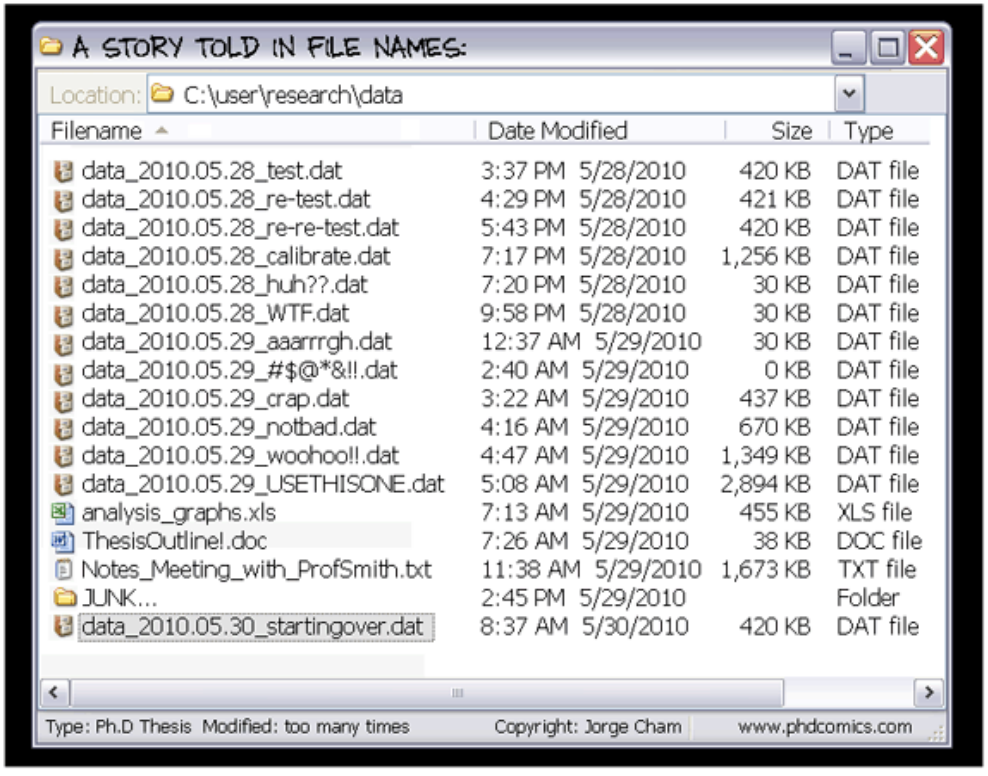


"Piled Higher and Deeper" by Jorge Cham
www.phdcomics.com

The problems...

Which version of my code did I use?

What parameters?



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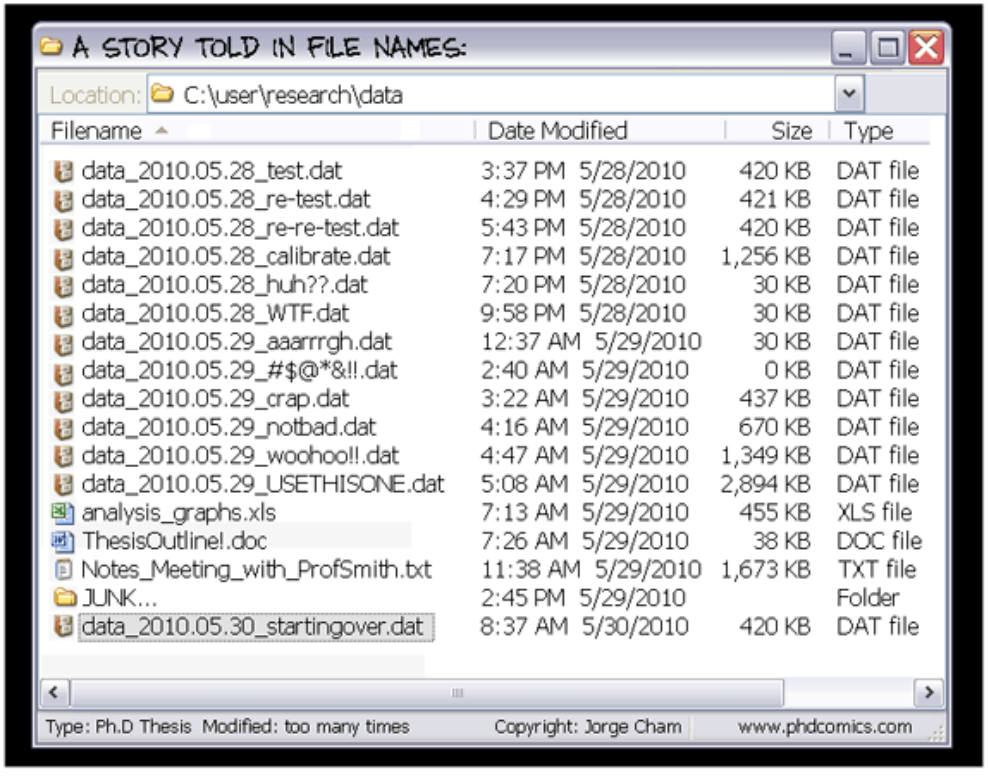

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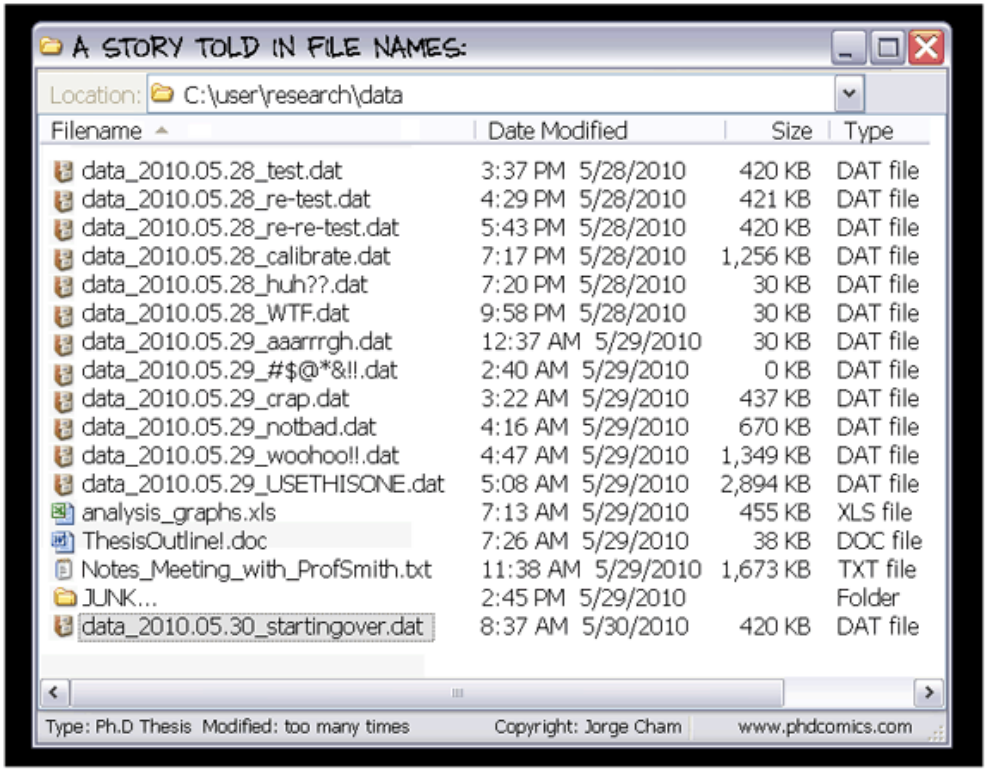

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The problems... ... the solution

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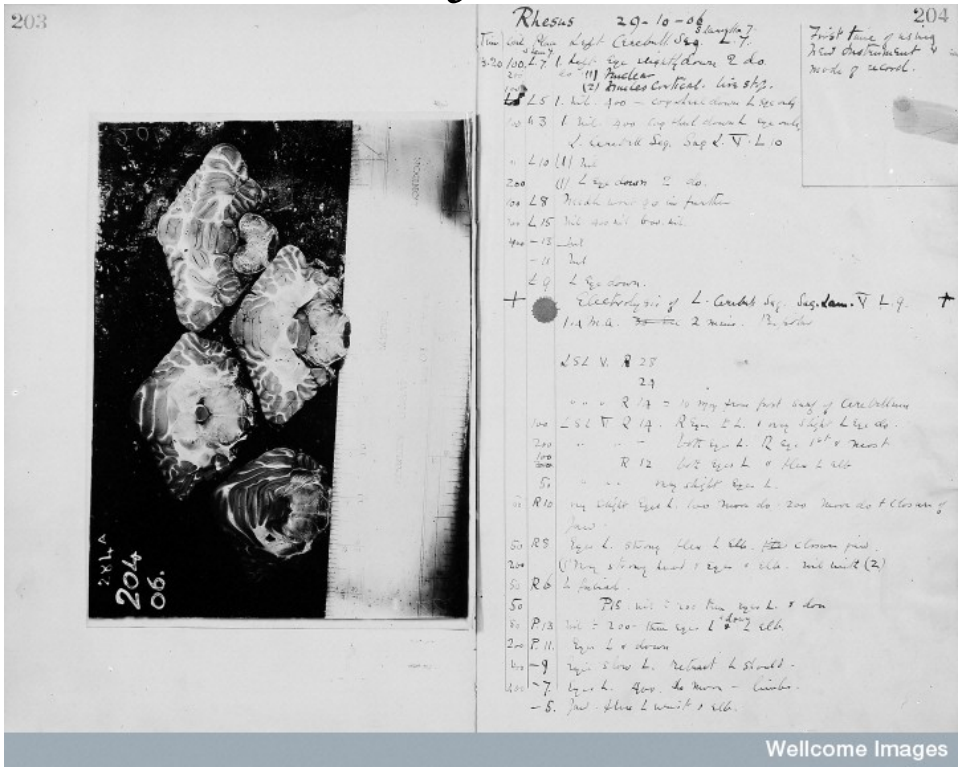
laboratory notebook



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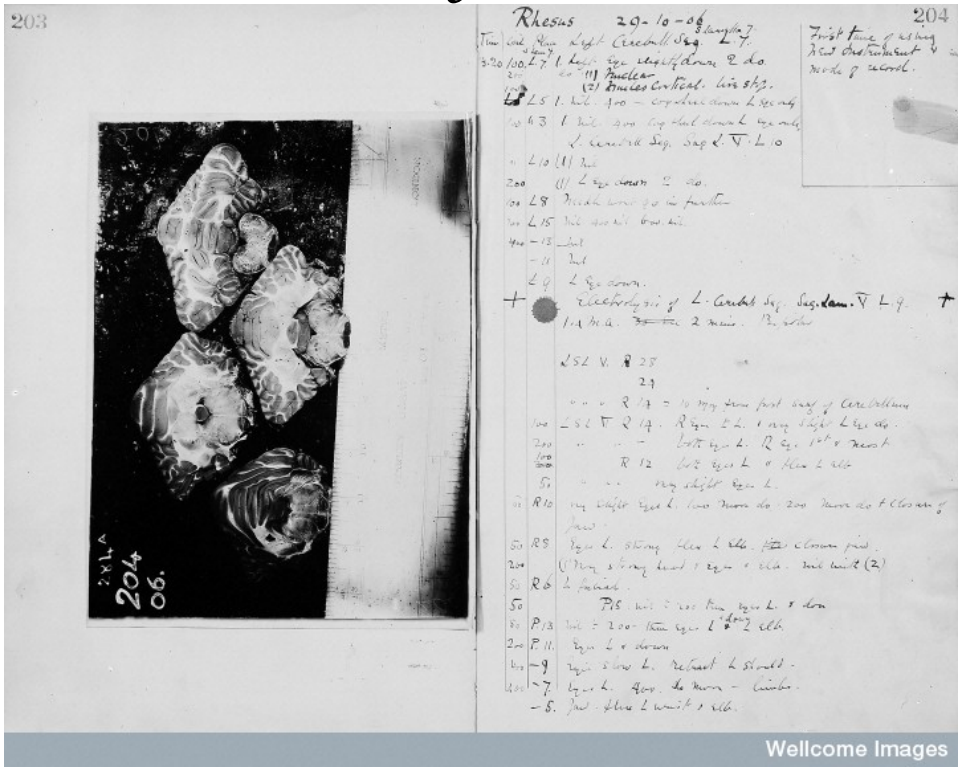

... in traditional, experiment-based research.

Sumatra - Simulation Management Tool

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"An automated lab notebook for computational projects"

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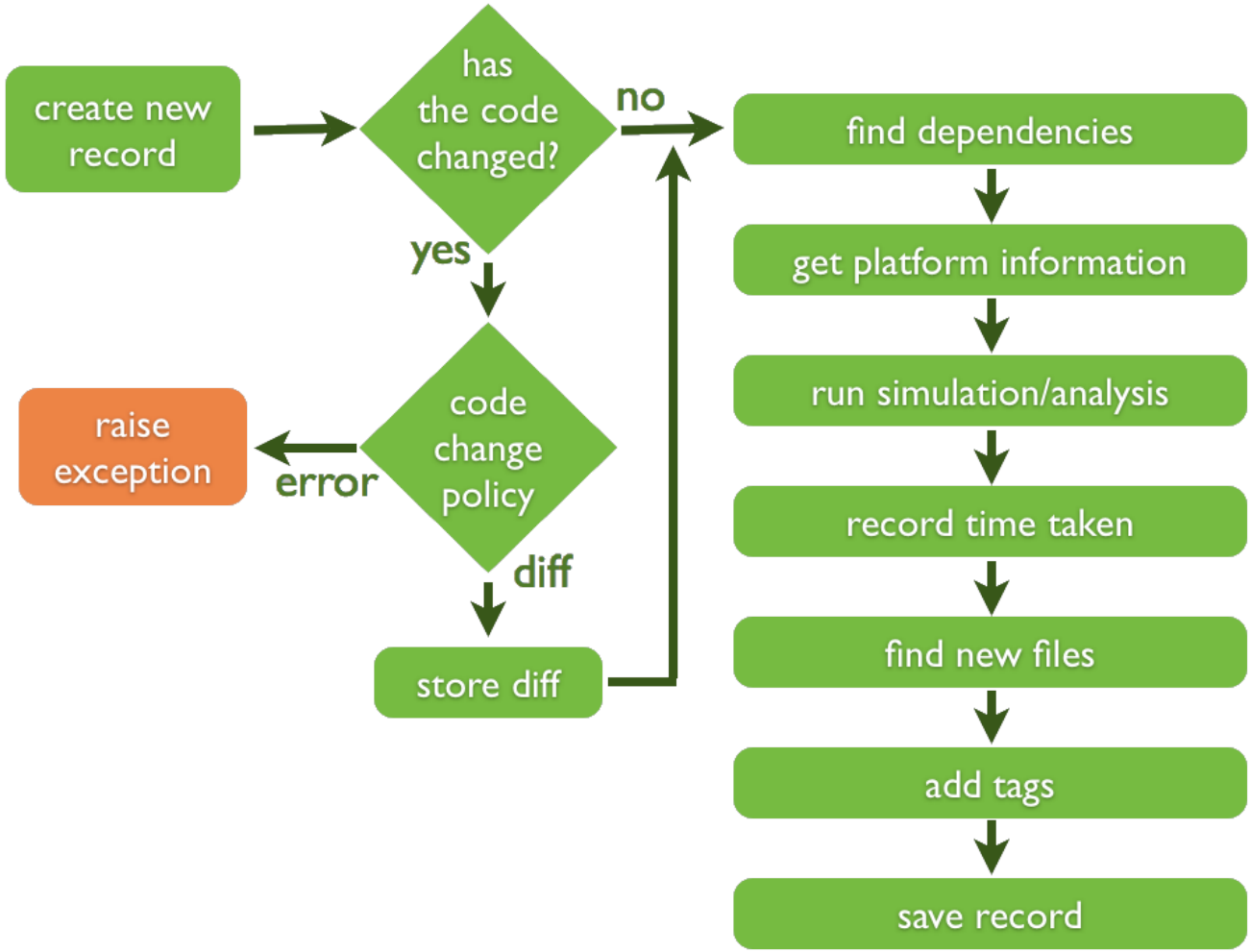


Sumatra - Simulation Management Tool

"An automated lab notebook for computational projects"

⇒ assumes that code is under version control

Sumatra - Simulation Management Tool

"An automated lab notebook for computational projects"

⇒ assumes that code is under version control

⇒ capture information about computation

`smt run`

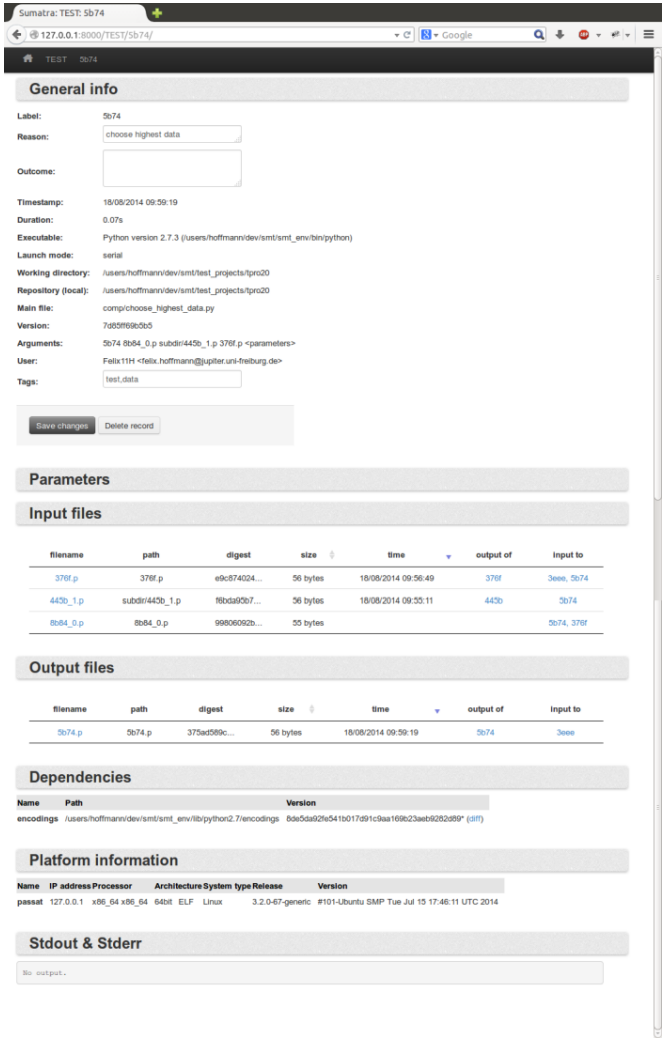
Sumatra - Simulation Management Tool

"An automated lab notebook for computational projects"

⇒ assumes that code is under version control

⇒ capture information about computation

⇒ make the information accessible through a command line and web interface



Sumatra - a tool for Reproducible Research

By capturing

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- version of the code

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} Full replicability of results

Sumatra - as an Open Science tool

computational research project

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computational research project

scientific code

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input data

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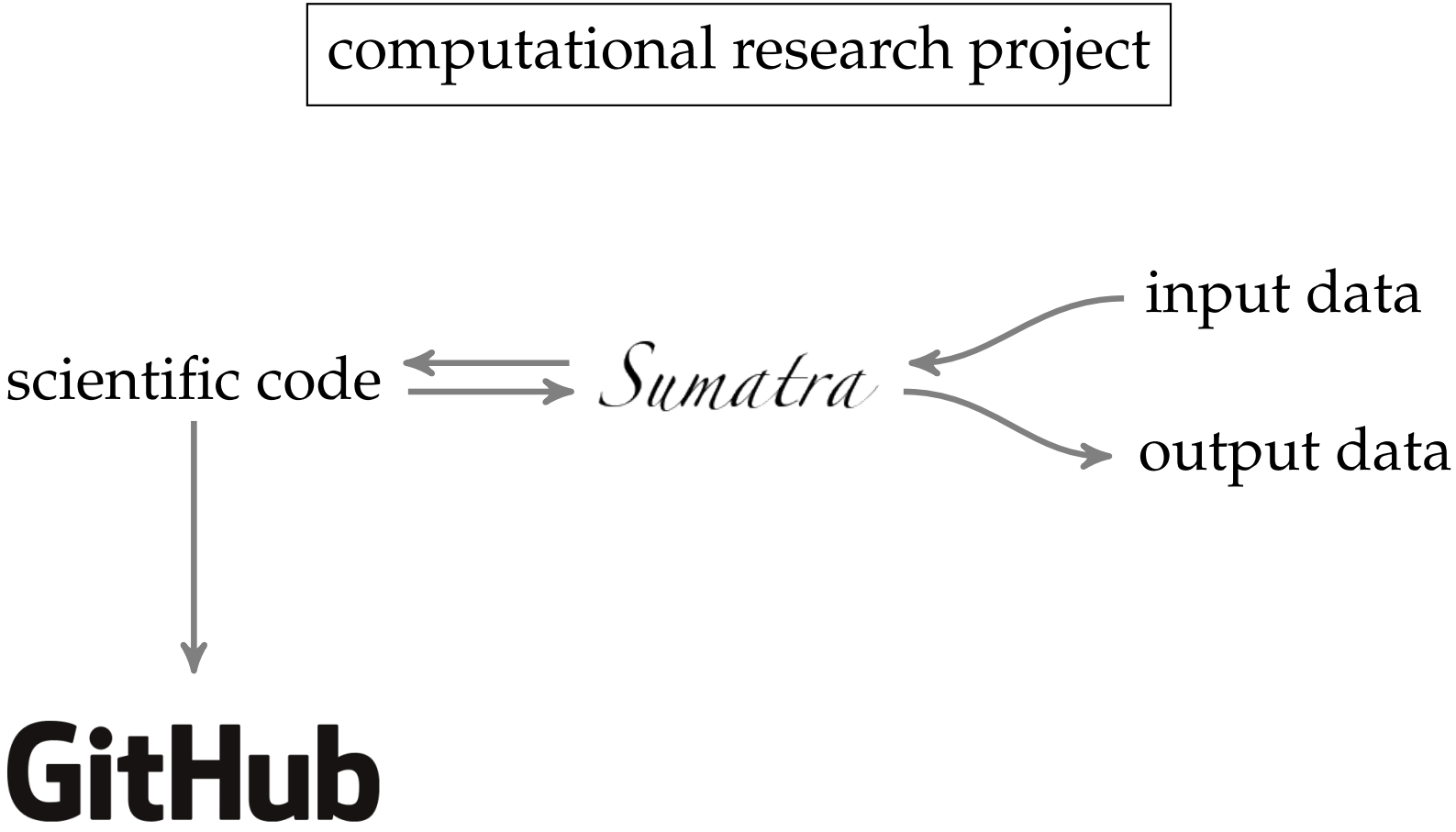

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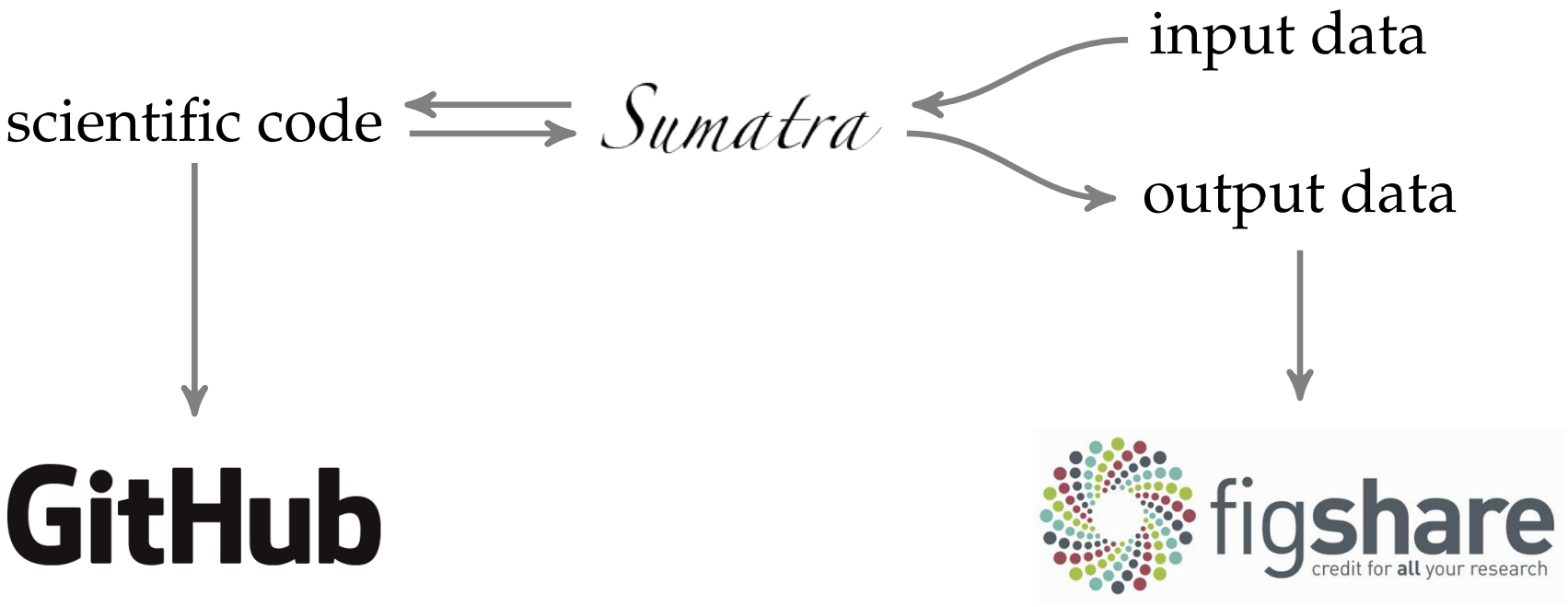

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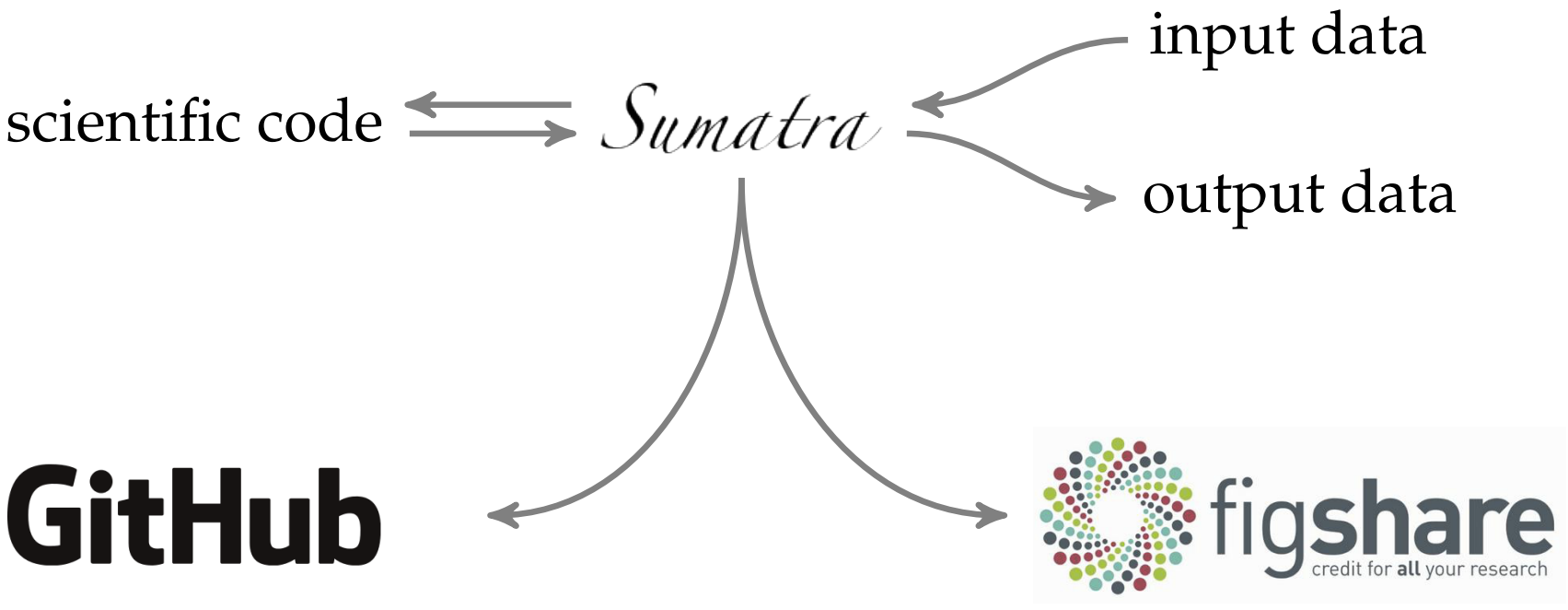

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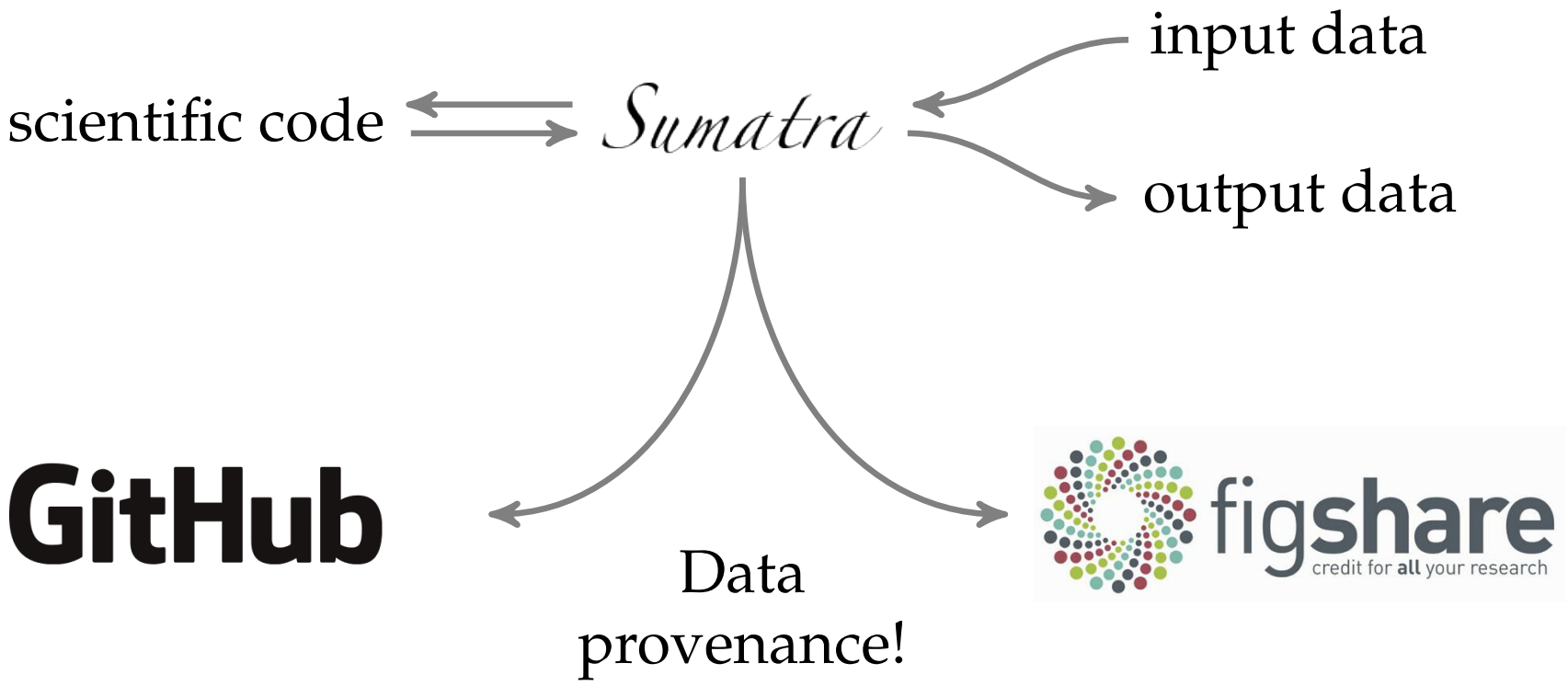

Thank you!

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