

# An annotated life with Python and neuroscience

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## A short personal history

- ▶ Pre-clinical medicine, and psychology
- ▶ Clinical medicine
- ▶ Neurology
- ▶ PhD (time) in Positron Emission Tomography

## My world in 1996-9

- ▶ SPM - in Matlab
- ▶ A lab full of doctors
- ▶ My first teaching
- ▶ My first toolbox

## Another world 1999-2003

- ▶ Cambridge research unit
- ▶ A lab full of scientists
- ▶ Very little experience of imaging
- ▶ The Kanwisher bomb via Russell Epstein
- ▶ Marsbar (version control, Sourceforge)

## Another world 2003-2005

- ▶ Berkeley psychology department
- ▶ University full of scientists
- ▶ FMRI still young
- ▶ Neuroimaging back then; SPM, AFNI, FSL
- ▶ Meeting Jarrod
- ▶ Starting with Python

# The world starts to change 2004-5

- ▶ The grant idea
- ▶ The grant meetings
- ▶ Fernando Perez, John Hunter, Travis Oliphant, Jonathan Taylor
- ▶ Python back then

## Adrift back home

- ▶ Cambridge research unit again
- ▶ A world of Matlab and “research support”.
- ▶ Nipy starts
- ▶ Dipy starts
- ▶ Scipy continues
- ▶ Fernando comes to Berkeley

# Back in the new world 2008-2017

- ▶ Numpy, scipy, Matplotlib
- ▶ Nibabel
- ▶ Nipy falls to pieces
- ▶ The IPython notebook, and Jupyter
- ▶ The Python wave, Pandas, Statmodels.
- ▶ The data science wave.



# Looking back

- ▶ Who's building?
- ▶ How are things built?

# Where we're headed

- ▶ The world of the programmers toolbox
- ▶ Code as basis for teaching
- ▶ Your name here

# A summary

- ▶ “Lento pero asplastante”
- ▶ Absurd ambition
- ▶ Find your team
- ▶ Anyone can play

# What's your goal?

Materials at <https://github.com/matthew-brett/life-in-python>.