

# Welcome to BrainHack School Mtl 2019!!

*August 5th-August  
30th, 2019*

# Why BrainHack school?



Olivia Guest | Ολίβια Γκεστ  
@o\_guest

Circling back to UGs in psych: they should be taught how to code — BUT! — it's also true for PhD students.

You need to learn to code. You can do it, we can help you, it's not as hard as you think, & it'll help you in the long run including to get a job.



neuroplausible: Why Women in Psychology Can't Program  
About two months ago my brother, who works in data science on social psychology data, asked me why his colleagues, who ...  
[neuroplausible.com](https://neuroplausible.com)

9:45 AM · Aug 4, 2019 · [Twitter Web App](#)

# Why BrainHack school?



**Jake VanderPlas**

@jakevdp

Following



My advice on learning Python:

Don't set out to "learn Python". Choose a problem you're interested in and learn to solve it with Python.

8:24 AM - 10 Sep 2017

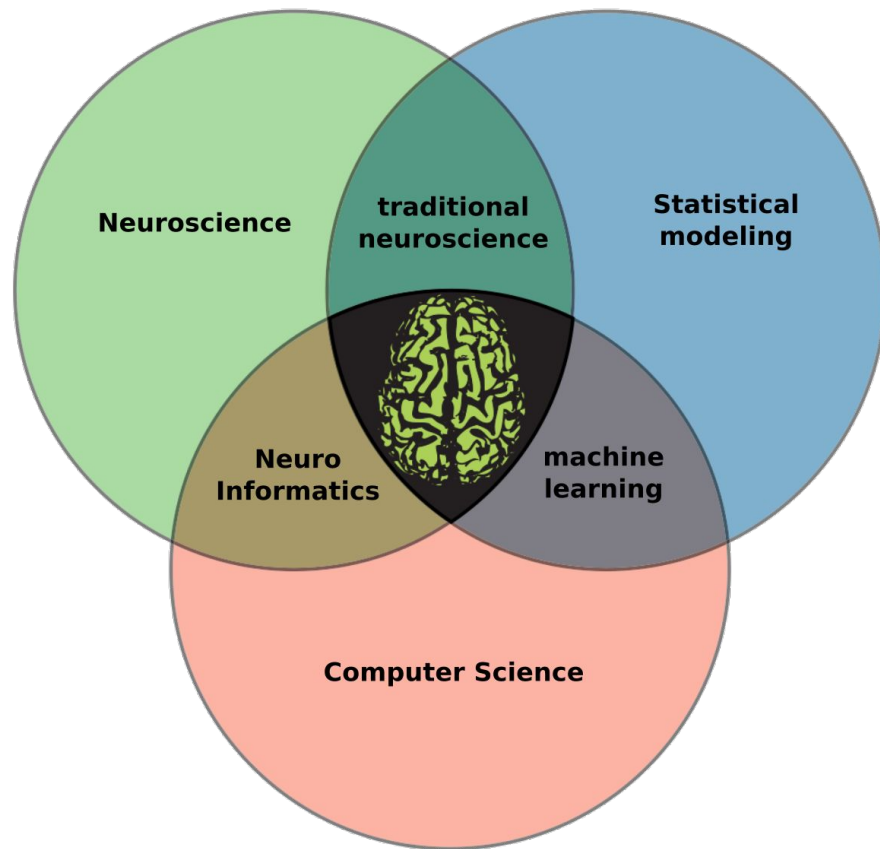
2,932 Retweets 8,810 Likes



201 2.9K 8.8K



# Neural data science

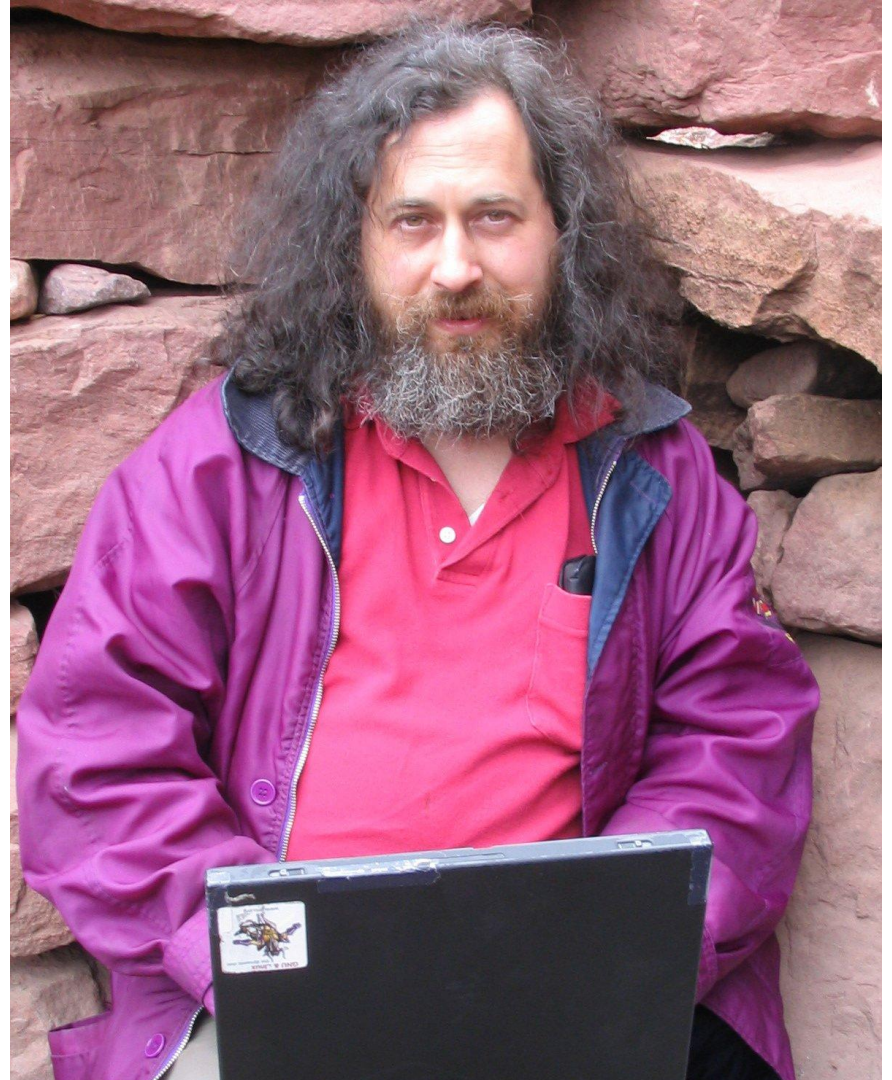




**“Being a hacker means  
appreciating playful  
cleverness”**

**“Sharing is good and,  
with digital technology,  
sharing is easy”**

**Richard Stallman**



## OPEN DATA



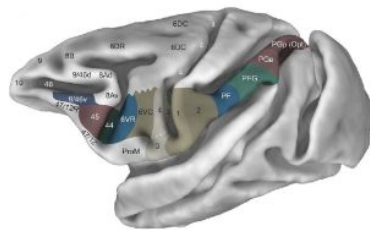
## OPEN CODE



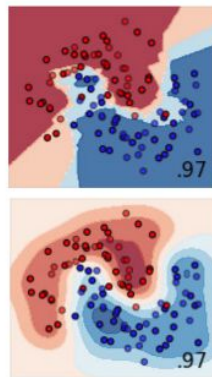
## HIGH-PERFORMANCE COMPUTING AND PIPELINES



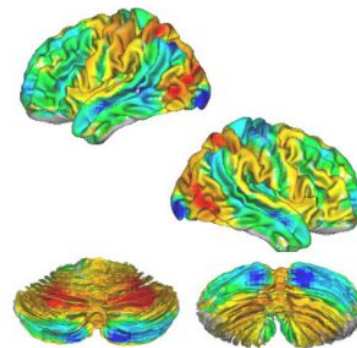
## DATA VISUALIZATION



## MACHINE LEARNING



## NEUROIMAGING



# Week 1: A foundational stack for neural data science





# Week 2: Project Definition





# Week 3: Project Implementation



# Week 4: Project Wrap-up





# Evaluation

- Week 1: coding quizz (10%)
- Week 2: project description (10%)
- Week 3: video summary (10%)
- Week 4: Oral presentation (28%)
- September 6th: project deliverables are due (30%)
- Overall participation (12%, 3% per week)



## Connect...



<https://tinyurl.com/slack-brainhackschool2019>



[#brainhackschool](#)



<https://github.com/mtl-brainhack-school-2019>

**Have fun! Help us create an open and enthusiastic space!**



Université   
de Montréal



 Concordia University  
**Engineering and  
Computer Science**



Institut et hôpital neurologiques de Montréal  
Montreal Neurological Institute and Hospital

 Centre de recherche  
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**UNF** Unité de  
neuroimagerie  
fonctionnelle



**UNIQUE**

Happy hacking!

