# CourseMatch at SciencesPo

CompEcon 2018



Monumental Tasks

monumental solutions

### Course Allocation at ScPo

- First come first serve
- low satisfaction ratings
- look how Wharton MBA does it?

# Term Project - Desired Output

- a working prototype for the course match problem
- a design document that clearly outlines the code in such a way that it can be passed on.

### Set up Teams

- 1. start with multiple teams. Towards end merge into one team
- 2. will take the best parts of each team's work
- 3. competition!

### Individual Homework for next time

1. read the report and the paper and work on a design document, maybe the wiki

#### 2. Think about

- 1. what is the purpose of the code to be written?
- 2. what are the main parts of the problem?
- 3. how are those parts related?

### Group Homework for Next Time

Every Group gives a 5 min presentation. no slides.

### **Topics**

- 1. **theory**: what is the relevant theory for the ScPo problem. explain efficiency vs fairness.
- 2. **computation**: what is the computational cost in terms of time? how does it scale with the number of servers? integrated or independent architecture?
- 3. algorithm: explain the algorithms outlined in the paper.

# Design Document

After we all agree on a design document, we start implementation.

- how to check whether we get a correct solution?
- start by designing a test suite
- create and assign issues on the repo: don't do anything on the code if there is not an issue for it. Let others know what you are working on!
- attack each issue with a corresponding pull request.
- \* First write a new test if the current test suite does not cover your PR. Then make the PR.

### Groups

- · Vladimir, Augustin, Stefan, Alais: Algorithm
- · Marie, Galo, Julie, Basile: Theory
- · Laura, Maxime, Luis, Daniel: computation