# The windy road to a digital campus

Pierre Dillenbourg, EPFL

### Digital ≠ Virtual



### EPFL Digital Campus

EPFL Fitness Room

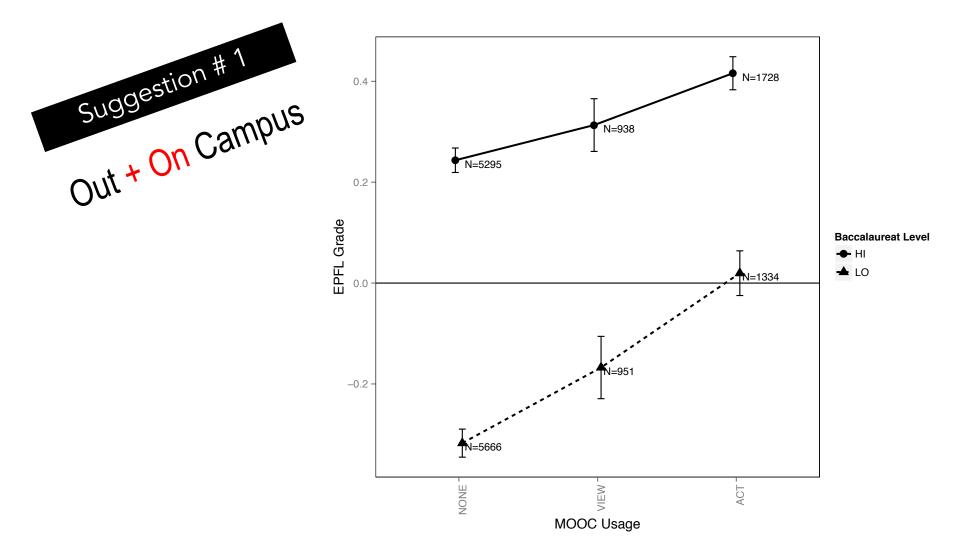




### EPFL Garden

### EPFL Campus<sup>+</sup>

#### EPFL MOOCs: 1'815'471 , 97'510





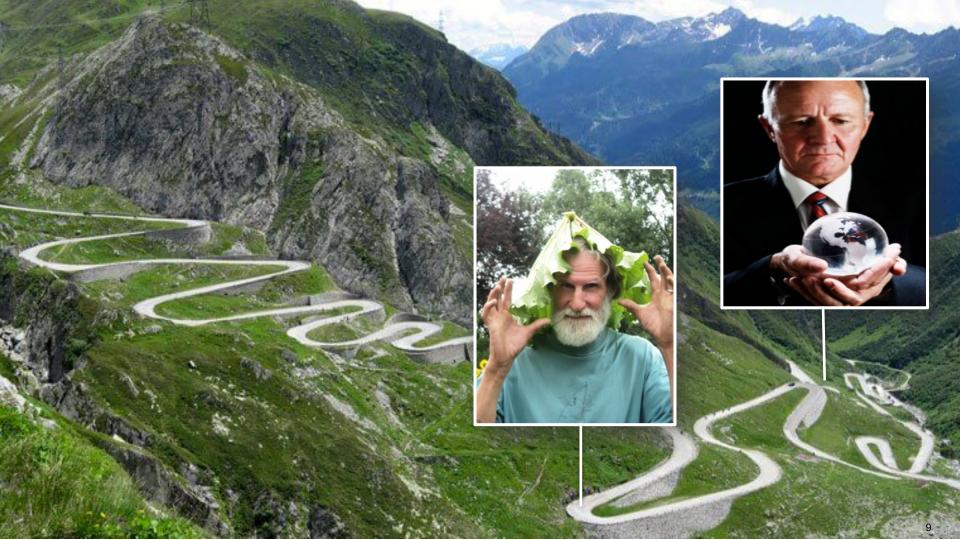
### The flipped classroom ?

### Yes, but there are diverse on-campus uses



Best Teaching Award – 2015

Jamila Sam & Jean-Cédric Chappelier





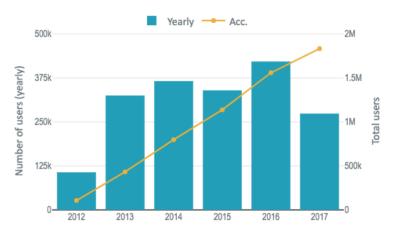
Don't let Gurus speak to your president !

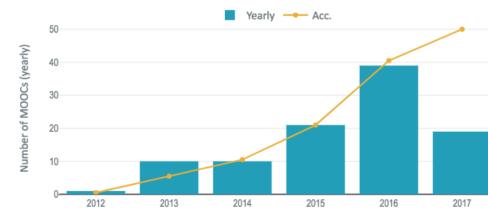
Because they promise miracles Nobody delivers miracles.



#### The hype is over, sustain the pace

Number of registrations per year





1'815'471 Registrations 97'510 Passed

FÉDÉRALE DE LAUSANÑE

77 Courses Online35 Courses In Preparation

MOOCs launched each year

Présentation EPFL - Public | 2017

100

80

60

40

20

Total MOOCs

ALL TIME

### Program on a Higher Level

Write elegant functional code to analyze data that's big or small

Functional Programming in Scala Specialization

Enre

available for learners

About this Specialization

Courses

Creators

FAO

Suggestion # 5 Learn more and apply. Find your USP

About This Specialization

Q

#### Discover how to write elegan. the first time it is run.

A fir Registrations! This Specialization provides a hands-on introduction to functional pros programming language, Scala. It begins from the basic building blocks o showing how to use these blocks to solve small problems, before building concepts to architect larger functional programs. You'll see how the functional par parallel and distributed programming, and through a series of hands on exact assignments, you'll learn how to analyze data sets small to large; from paraller architectures, to distributed programming on a cluster using Apache Spark. A fil allow you to apply the skills you learned by building a large data-intensive applica data.

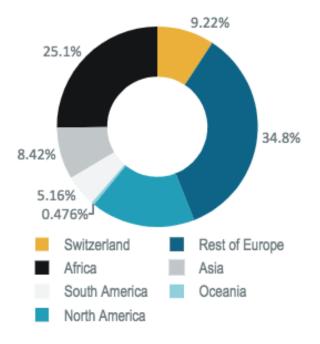
Created by:



#### Language Matters

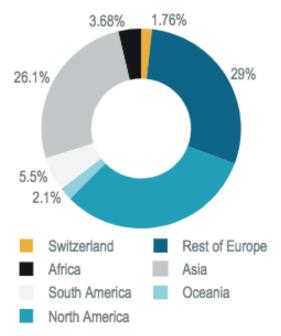
Geographical distribution

for all French MOOCs combined



Geographical distribution

for all English MOOCs combined

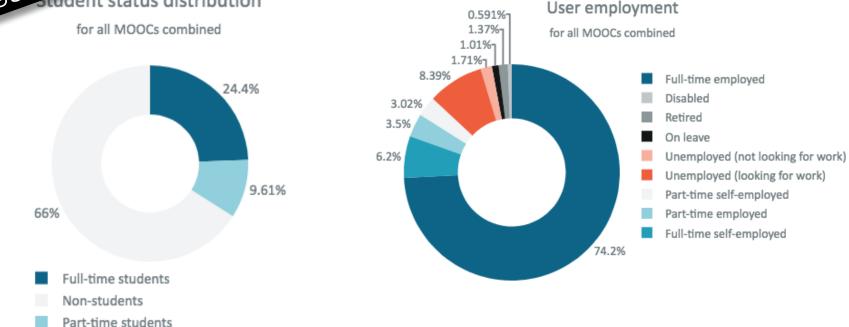




Suggestion # 6

#### Skills that are valuable on job market

### Suggestion Suggestion





### **Certificate of Open Studies**

#### Gestion et planification de la ville africaine





Travail

personnel 8 crédits



Certificat COS EPFL 20 crédits

















Villes africaines I: Introduction à la planification urbaine

Jérôme Chenal

#### Partie I:

#### Introduction aux systèmes d'information géographique

Stéphane Joost, Marc Soutter, Fernand Kouamé, Amadou Sall

#### Villes africaines: Quartiers précaires

Isagha Diagana, Jérôme Chenal

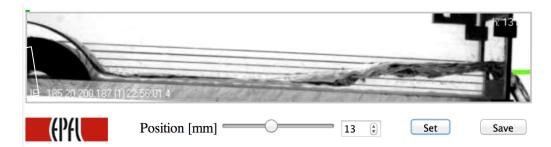
Villes africaines: Mobilité et transports Pape Sako, Jérôme Chenal

Villes africaines: Environnement et enjeux de développment N'Diékhor Yemadji, Jérôme Chenal

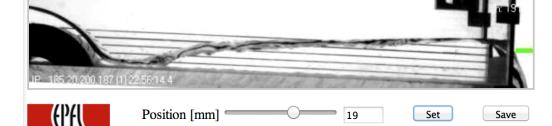
Eawag-Sandec et EPFL proposent ce cours conjointement avec des experts en assainiss de la Banque Mondiale et de l'OMS.

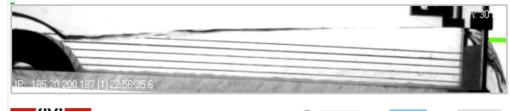
Planification et Design de Systèmes et Technologies d'Assainissement











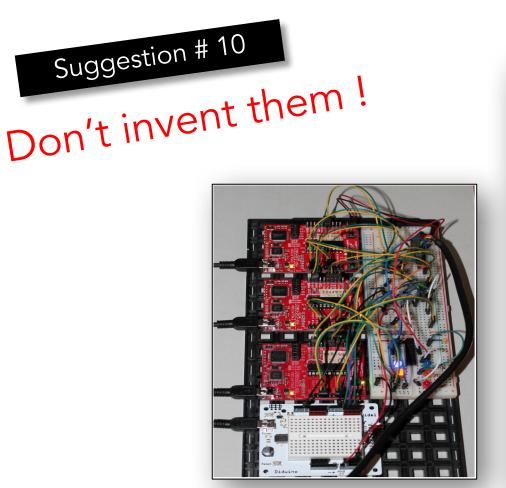
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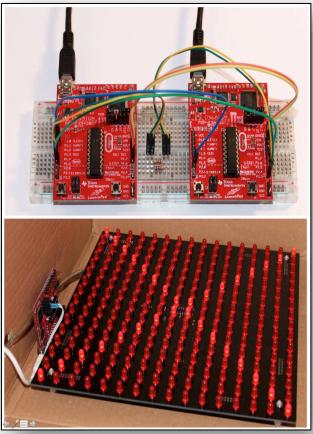
Save

30

Position [mm]

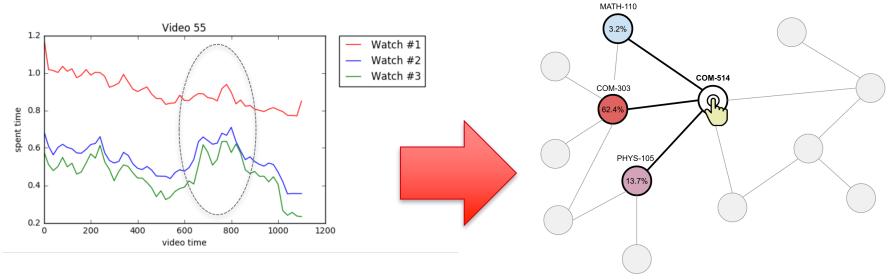






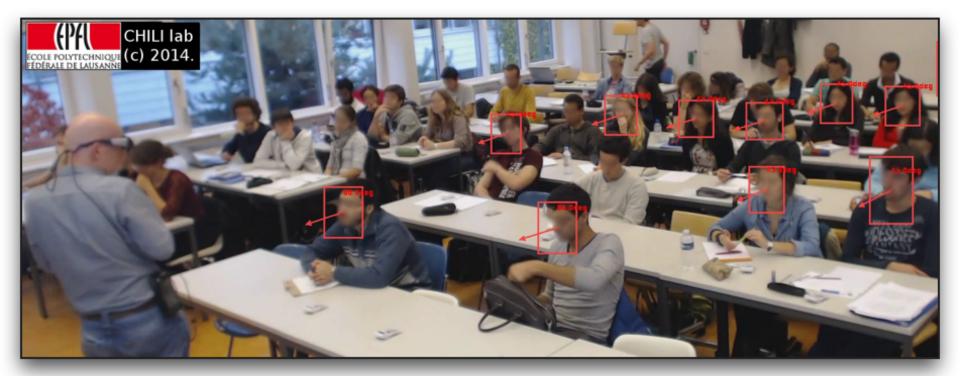
coursera





DANYAR CHUMBALOV, VOLKAN CEVHER

### Campus analytics



Kernel	Features	Score	Cohen's kappa
RBF(c=1.31, g=0.0211)	Distance, Head travel norm., Num. still periods	61.86%	0.30
RBF(c=1.21, g=0.11)	Period, Row, Head travel norm., Mean duration still	61.72%	0.32
RBF(c=1.11, g=0.061)	Head travel norm., Mean duration still	60.42%	0.28
RBF(c=1.4, g=0.04)	Period, Distance, Row, Mean duration still	59.23%	0.30



## If your president is not totally convinced, don't even try !

(top-down push, bottom-up trigger)

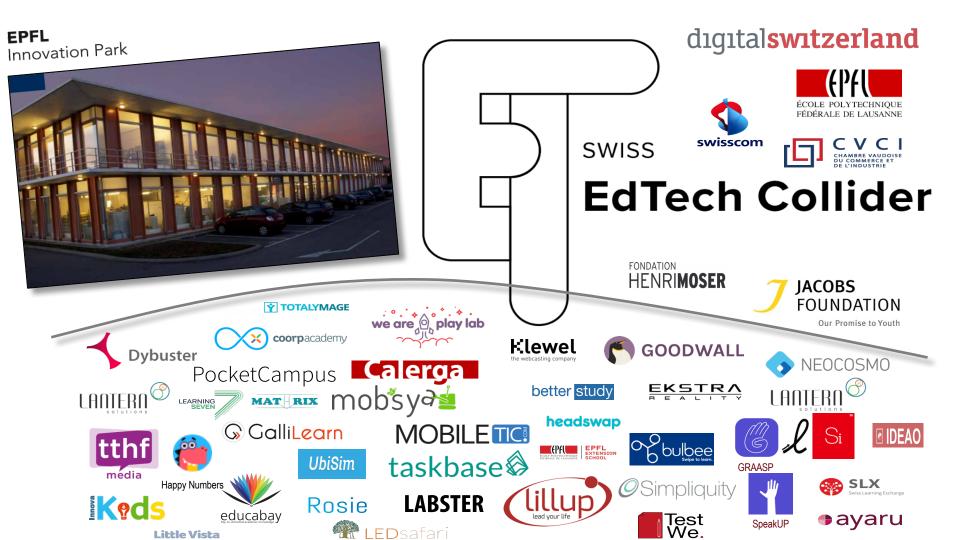
#### EPFL MOOC strategy

- Gain worldwide visibility
- Renew/valorize teaching on campus
- Develop continuing education
- Generate revenues
- Research on learning
- Maintain relationship with alumni
- African french speaking countries

#### EPFL Digital Campus Strategy

• MOOCs, MOODLE, PRS, ....

- Vice-presidency IT
- Computational Thinking Class for all freshmen
- Center for Data Sciences (with ETHZ)
- Research on digital education, education robotics, etc.
- Entrepreneurship in digital education



### **EPFL** Digital Education Ecosystem

