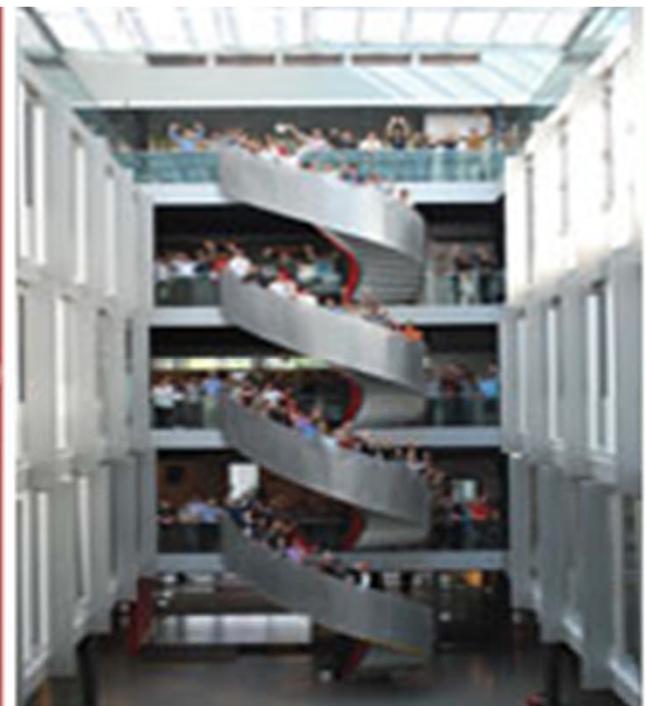


# PhD in Computer & Communication Sciences at EPFL

[phd.epfl.ch/edic](http://phd.epfl.ch/edic)  
[edic@epfl.ch](mailto:edic@epfl.ch)



# Did you know?



EPFL is the world's most  
international campus

129 nationalities on campus

As ranked by Times of Higher Education (2015)

# EPFL at a Glance



9000 Students (of which 2000 PhD)  
350 Professors / 900 instructors  
3294 Employees

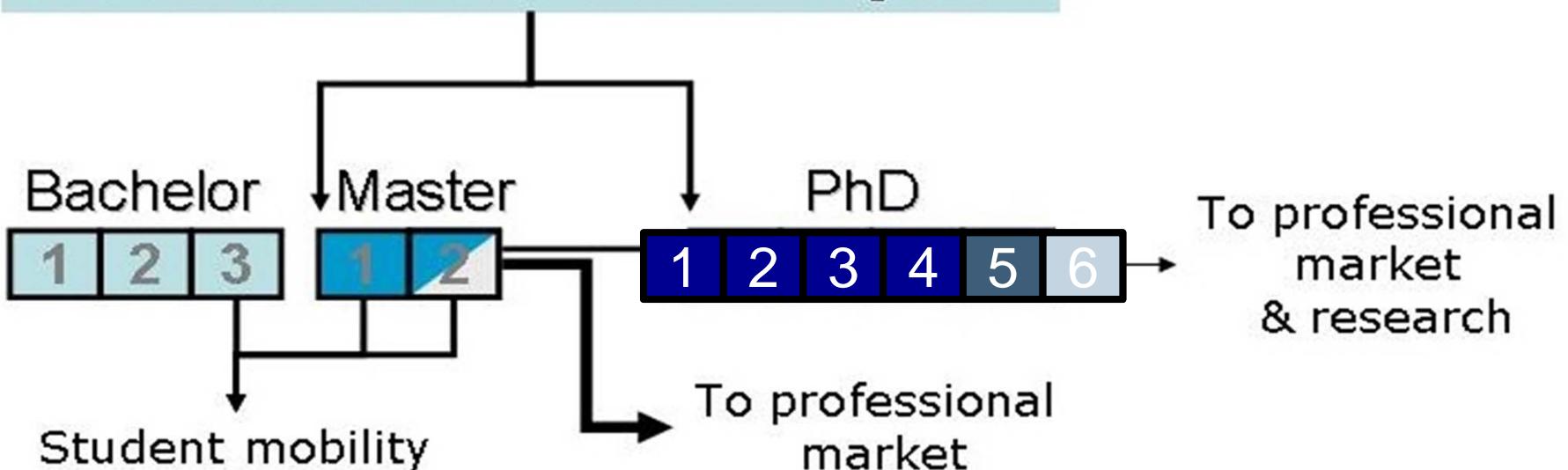
50% of faculty from abroad  
40% foreign students  
BS program in French, *MS and PhD programs in English*

# Curriculum

Undergraduate	Graduate	Postgraduate
Bachelor (BS)	Master (MS)	Executive Master (EM)
	Doctoral Studies (PhD)	Master of Advanced Studies (MAS)
		Continuing Education

Bologna-based curriculum

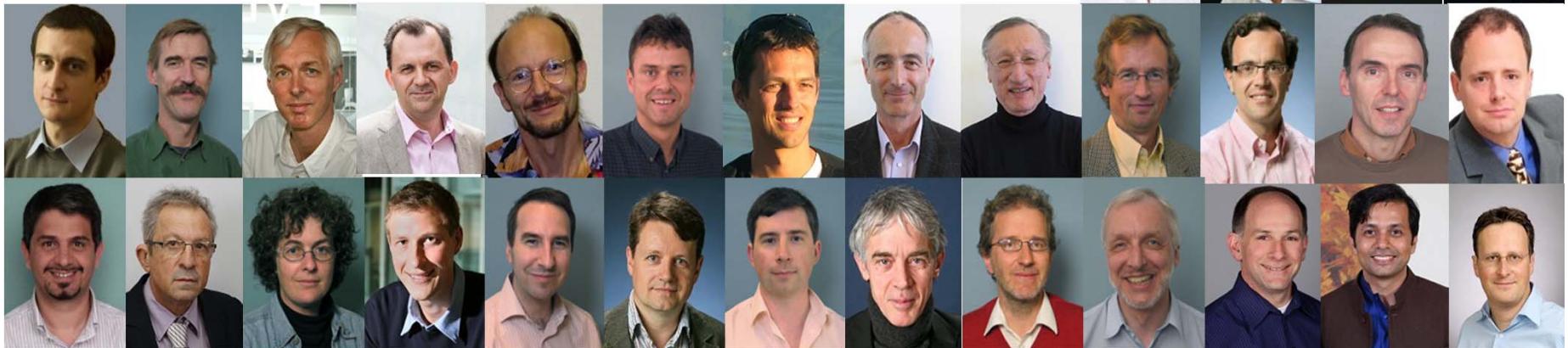
International students with a first degree



# Computer & Communication Sciences: Who we are

## 40 faculty

- **From peer schools**  
(e.g., Berkeley, CMU, Cornell, MIT, Stanford, ...)
- **Internationally recognized**  
(e.g., Turing Award, US National Academies, ACM/IEEE Fellows)
- **Strong industrial liaison**
- **Covers theory to IoT & Cloud**



# Additions to our faculty



Bryan Ford  
Security  
PhD, MIT



Wenzel Jakob  
Graphics  
PhD, Cornell

Christos Kozyrakis  
Systems  
PhD, Berkeley



Michael Kapralov  
Theory  
PhD, Stanford



# Program in a Nutshell

## Stats:

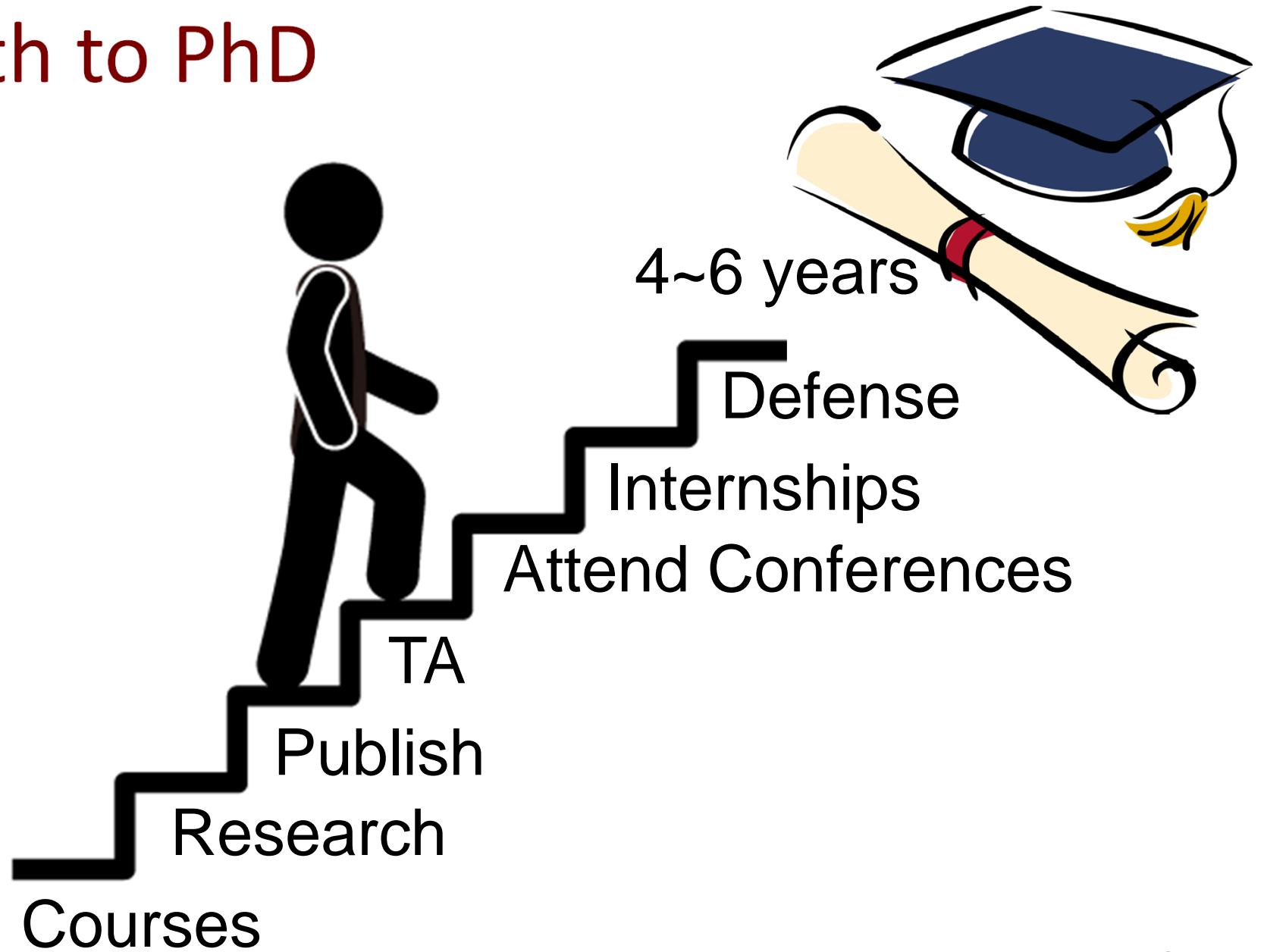
- 260 PhD students (largest program on campus)
- 45 per year join from ~ 700
- ~5 PhD students per IC faculty (+ affiliated faculty)

## Info:

- 4-6 years
- In English
- Paid at 75% entry-level engineering salary
- Admission/Candidacy cycle similar to the US
- Admit 4-year BS programs

Application deadline: Apr. 15<sup>th</sup>,  
2016!

# Path to PhD



# 40 students on internship worldwide in 2015!



csem



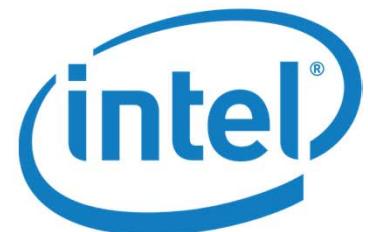
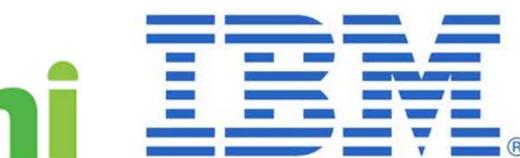
Honeywell

ORACLE®

QUALCOMM®

NEC

vmware®



# Industrial Scholarship Winners 2014

Kaynak



Kasikci



Kocberber



Sadeghipoor



Ngo



Alagiannis



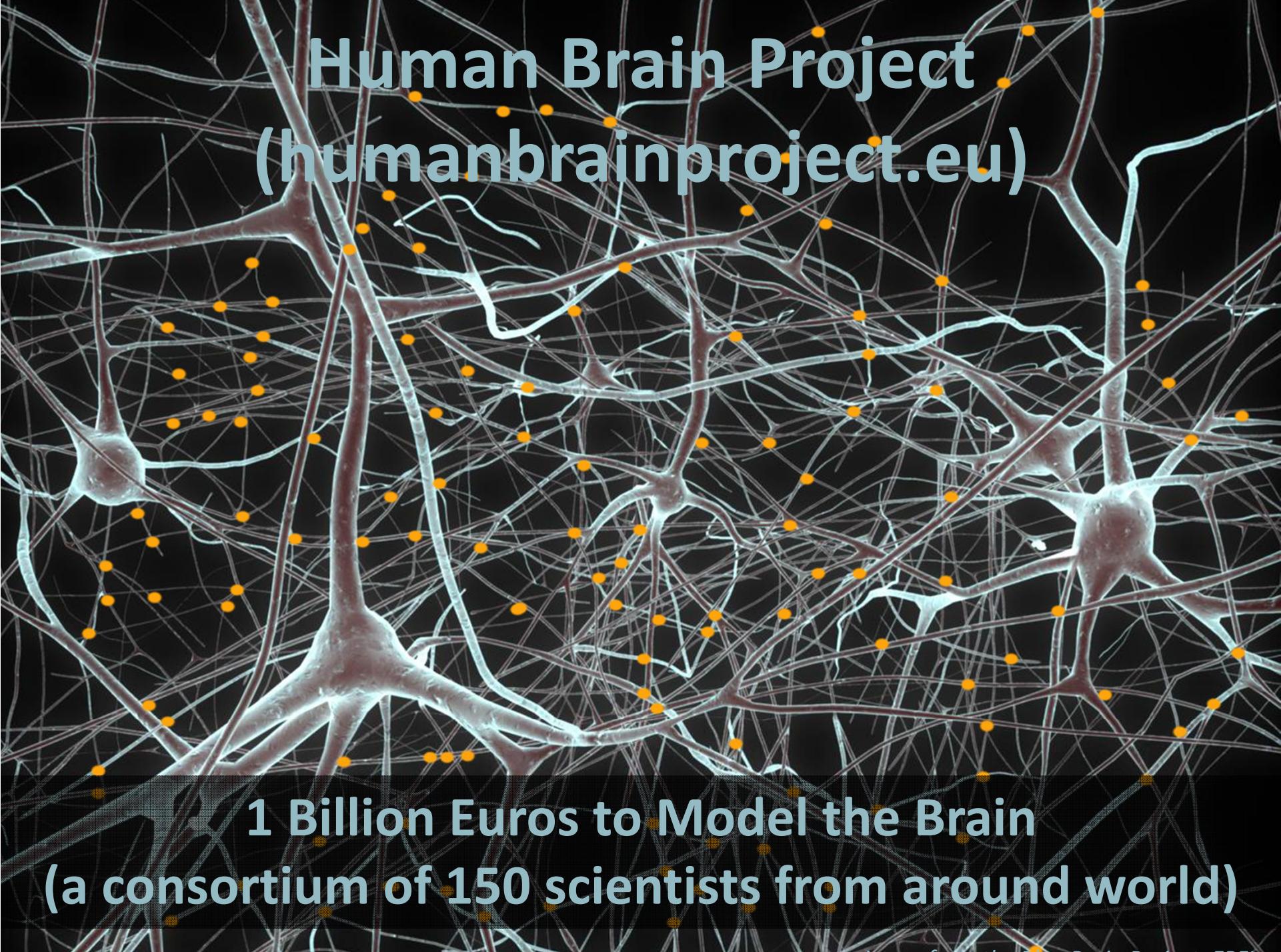
Dokmanic



# Research

[phd.epfl.ch/edic/members](http://phd.epfl.ch/edic/members)

- Algorithms & Theoretical Computer Science
- Artificial Intelligence & Machine Learning
- Computational Biology
- Computer Architecture & Integrated Systems
- Data Management & Information Retrieval
- Graphics & Vision
- Human-Computer Interaction
- Information & Communication Theory
- Networking
- Programming Languages & Formal Methods
- Security & Cryptography
- Signal & Image Processing
- Systems



# Human Brain Project

([humanbrainproject.eu](http://humanbrainproject.eu))

1 Billion Euros to Model the Brain  
(a consortium of 150 scientists from around world)

# Venice Time Machine

(vtm.epfl.ch)

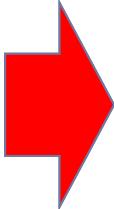
Big Data for Digital Humanities:  
Online view of millennia of city's history



# Microsoft Unveils Catapult to Accelerate Bing!

[EcoCloud Annual Event, EPFL, 2014]

[ecocloud.ch](http://ecocloud.ch)



- *Machine Learning Gets Big Boost  
from Ultra-Efficient Convolutional  
Neural Network Accelerator*
- *EPFL one of two schools worldwide  
to get a rack of Catapult!*



# Industry and Startups

## Startups: Some recent news

- Kandou raises major investment
- Typesafe/Scala (used by Amazon, Twitter)
- BugBuster acquired AppDynamics

## Industrial collaborations

- EcoCloud center
- Tablets on campus  
(AXA, Credit Suisse, ELCA, Logitech, ....)
- Major research grants from key players  
(Microsoft, Google, Oracle, Qualcomm, ....)



# Research Internships for BS Students



MAKE THE  
MOST OF  
YOUR SUMMER

<http://ic.epfl.ch/SummerAtEPFL>



SCHOOL  
OF COMPUTER  
AND COMMUNICATION  
SCIENCES



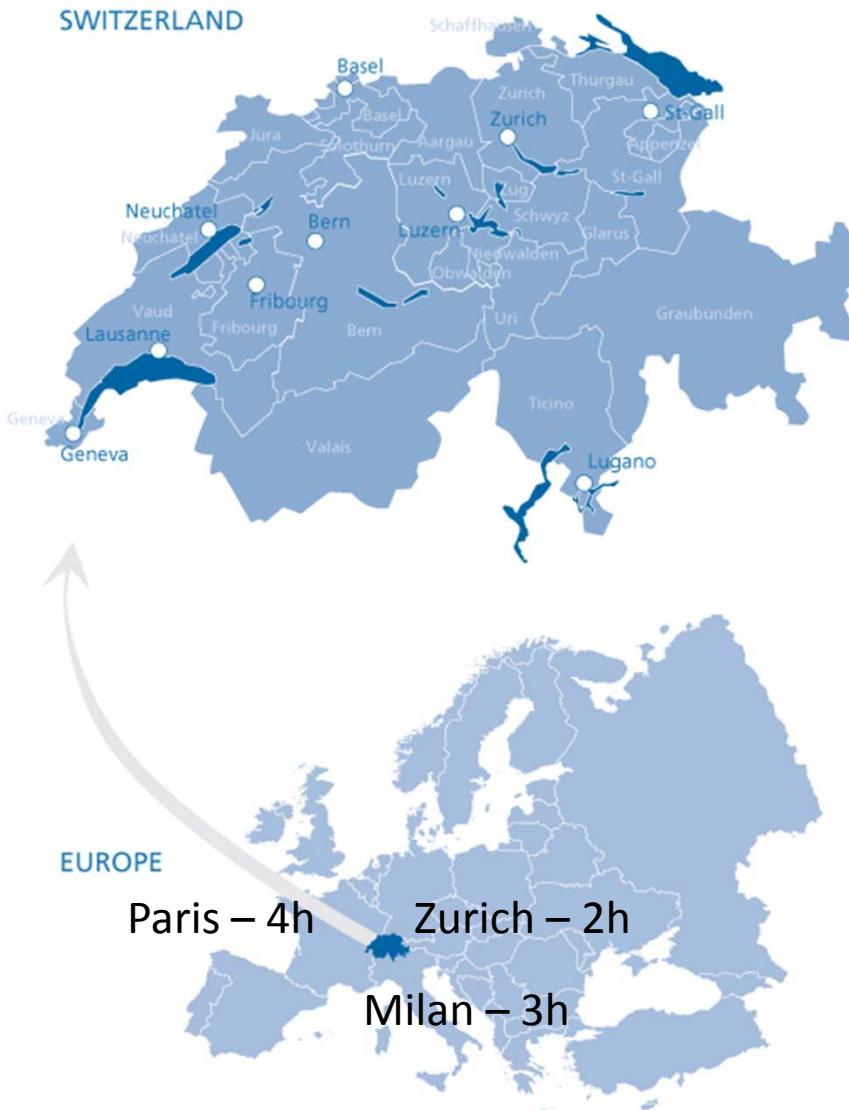
## Summer@EPFL

PERFORM A THREE-MONTH PAID INTERNSHIP IN SWITZERLAND

Participate in world-class research projects at one of the most prestigious campuses.

Open to all BSc and MSc students in Computer Science, Computer Engineering, Telecommunications or Electrical Engineering.

# Switzerland at the heart of Europe



- Borders Germany, Austria, Italy & France
- ~7.8 million people
- Languages: German, French, Italian, Romansh (official)
  - Most speak English
- Beautiful alps + lakes

# Switzerland Tops Many Charts

#1 in global competitiveness

Top # of innovations/capita

Top # of startups/capita

Top spender of IT/capita

Top standard of living

[source: The Economist, World Economic Forum, OECD]



# Some of our graduates....

**Ayfer Ozgur**

Prof. at Stanford



**Sotiria Fytraki**

Maxeler



**Onur Kocberber**

Oracle labs



**Amin Karbasi**  
Prof. at Yale

**Milan Vojnovic**

Microsoft Research



**Shahram Khazaei**

Prof. at Sharif



**Eva Darulova**

Prof. at MPI-SWS



**Soheil Mohajerzefreh**

Prof. at Minnesota



**Ali Galip**

Google



**Xavier Jimenez**

Sensefly



**Olivier Crameri**

Founder  
BugBuster

For more info please visit  
[phd.epfl.ch/edic](http://phd.epfl.ch/edic)

Send questions to  
[edic@epfl.ch](mailto:edic@epfl.ch)

