

Welcome

MEREC (Doctoral Studies)

Mathieu Lagrange 



Outline

① Mathieu Lagrange

② Knowledge

③ Agenda

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Mathieu Lagrange

Education

- ✧ Bac S
- ✧ Deug in Mathematics and Computer Science
- ✧ Master in Computer Science
- ✧ Phd in Computer Science (2004)

Visited Lab's

- ⌘ LaBRI, Bordeaux, France
- ⌘ Orange Labs, Rennes, France
- ⌘ Mystic, Victoria University, Bc, Canada
- ⌘ Music Tech, McGill, Qc, Canada
- ⌘ Telecom ParisTech, Paris, France
- ⌘ IRCAM, Paris, France
- ⌘ LS2N, Nantes, France

Activity

- ⌘ Research : musical and environmental digital audio processing
- ⌘ Teaching : SIGMA, PDS, SciMU
- ⌘ Advising : master's and PhD in environmental data processing

`http://mathieulagrange.github.io`

Knowledge

A tiny bit of knowledge economy

- ⌘ providing knowledge does not make you stupid (hopefully)
- ⌘ putting knowledge together create more knowledge
- ⌘ but

But

- ⌘ Data is **NOT** knowledge
- ⌘ " Drowning in data yet starving for knowledge " (John Naisbitt, 1982)
- ⌘ Going efficiently from data to knowledge is one of the challenge of this century

Transferring knowledge

is not trivial

⌞

$$\Phi(k) \propto At$$

- ⌞ where t is time and A is attention
- ⌞ Thus, a large part of the art of teaching is to nurture the engagement of the student
- ⌞ for a researcher, this is the same
- ⌞ except that, at some point, the researcher is at the same time the student and the teacher

Autonomous knowledge acquisition

is the feature that distinguish a researcher from a well trained student (engineer)

- ✎ one of the goal of the doctoral studies
- ✎ you are here to learn how to be autonomous in your ability to obtain and share knowledge
- ✎ be it already known
- ✎ or supposedly unknown

Methods

Seeking autonomy in research goes through

- ✧ being a good student
- ✧ with a good teacher
- ✧ slowly become a good teacher
- ✧ while remaining a good student

Agenda

Agenda

- ✧ series of 4 slots of 3 hours
- ✧ room for interruption and discussion
- ✧ as much as needed
- ✧ things can also be discussed privately

Agenda

- ① Day 1 morning : Background
 - ✍ Introduction
 - ✍ Science
- ② Day 1 afternoon : Project management
 - ✍ The PhD, make it work on a daily basis
 - ✍ **Case studies : conceptualizing personal projects**
- ③ Day 2 morning : Social Environment
 - ✍ The academic world
 - ✍ jobs, after the PhD
- ④ Day 2 afternoon : Publication matters
 - ✍ **Presentations of case studies**
 - ✍ Writing a paper
 - ✍ Displaying data
 - ✍ **Feedback**

Environment



Web site

<https://github.com/mathieulagrange/merec>