

UNIVERSITÉ  
CÔTE D'AZUR



ÉCOLE UNIVERSITAIRE DE RECHERCHE  
**SYSTÈMES NUMÉRIQUES  
POUR L'HUMAIN**

**Fall 2024**  
**Minors**  
**and**  
**Projects**



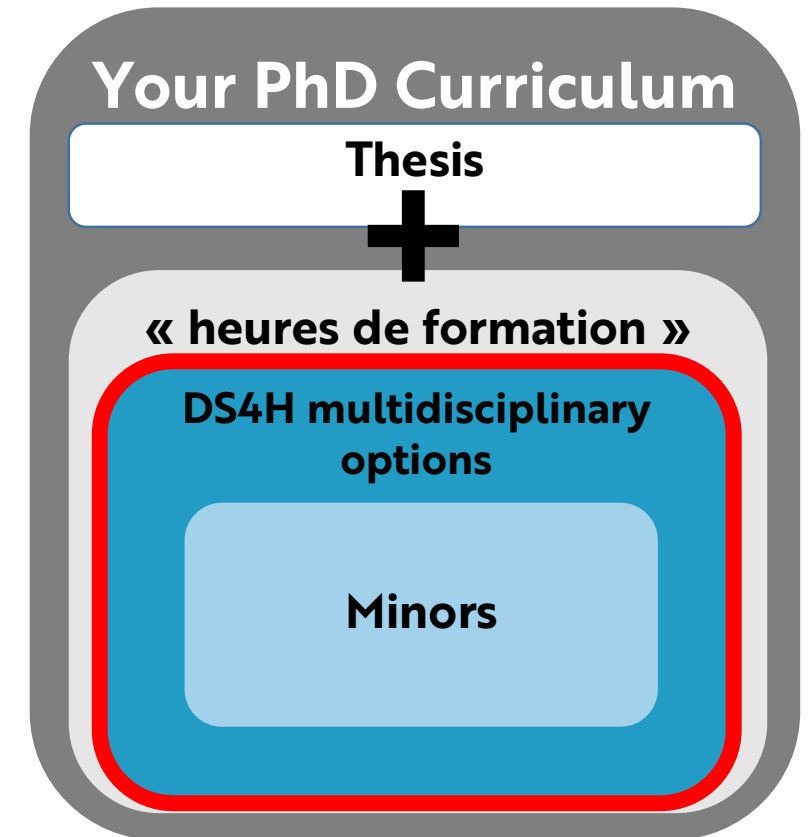
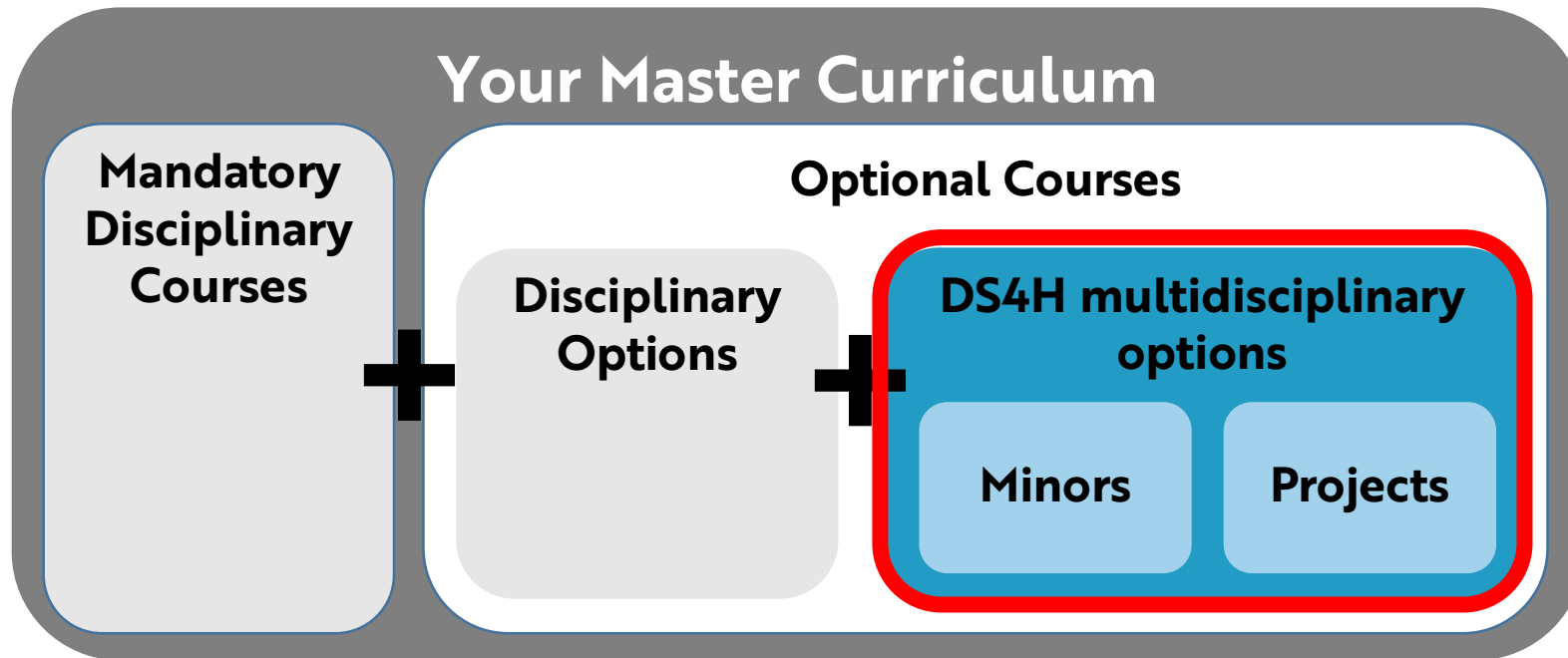
**12h00-12h20**

**DS4H Modular Education Program**

**Overlook**

<https://ds4h.univ-cotedazur.eu/minors>

# A fully modular education program



# DS4H Multidisciplinary Options

## 13 Minors

- **3 ECTS**
- **Low prerequisites**
- **In English**
- **Usually on Thursday mornings**
  - **from Oct 10 to Dec 12**
  - **Possibly online**
  - **Possibly full week (January 13-17)**

<https://ds4h.univ-cotedazur.eu/minors>

## 3 types of Projects

- **3 to 6 ECTS**
- **3 types of projects:**
  - **Research in tutorship**
  - **Research in a multidisciplinary team**
  - **HIC Creativity Project**
- **Research projects:**
  - **One day / week for a minimum of 8 weeks**
  - **+ one full week immersion (from Dec 16<sup>th</sup> to Dec 20<sup>th</sup>)**

<https://ds4h.univ-cotedazur.eu/projects>

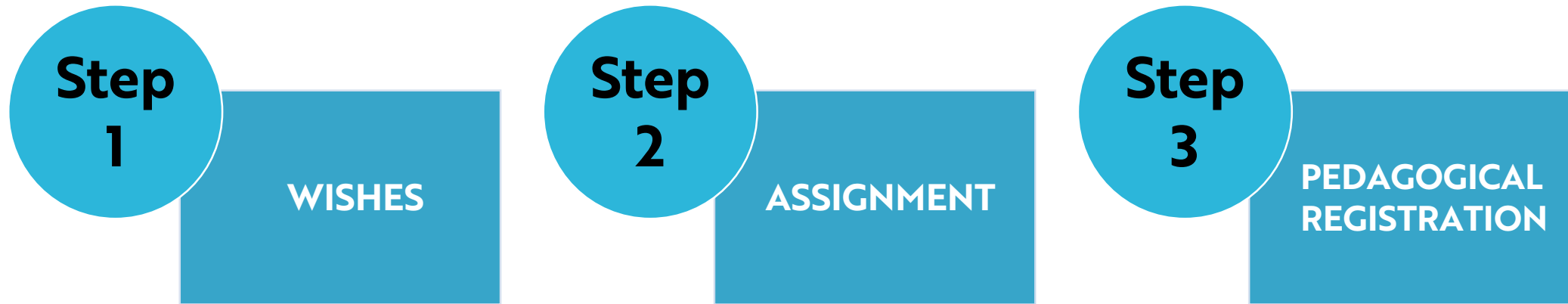
# DS4H Options – Who is concerned?

Your Curriculum	Initial Training		Apprenticeship	
	Minors	Projects	Minors	Projects
M1 Informatique	possible	mandatory	no	no
M1 Informatique parcours IA	possible	mandatory	no	no
M2 informatique EIT Digital	possible	no	-	-
M2 informatique, except Ubinet	mandatory	no	no	no
M2 informatique Ubinet	possible	no	-	-
M1 MIAGE	no	no	no	no
M2 MIAGE NUMRES	mandatory	no	no	no
M2 MIAGE SIRIS	mandatory	no	no	no
M2 MIAGE MBDS	mandatory (minor or project)		no	no
M2 MIAGE IA2	mandatory (minor or project)		no	no
M1 Electronique	possible	possible	no	no
M2 Electronique	possible	possible	no	no
M1 Stratégie Digitale	possible	possible	possible	possible
M2 Stratégie Digitale	possible	possible	possible	possible
M1 Droit des affaires	possible	possible	-	-
M2 Droit de la PI et des nouvelles technologies	mandatory	possible	no	no
M1 Psychologie ECTN	mandatory	no	no	no
M1 HIC MAJIC	possible	no	no	no
M2 HIC MAJIC	possible	no	no	no
M1 HIC MAPIC	possible	no	possible	no
M2 HIC MAPIC	possible	no	possible	no
M1 Sciences du langage	no	no	no	no
M2 Sciences du langage, TAT	possible	no	no	no
M1 LEA LAI RFI	no	no	no	no
M1 LEA TRE	mandatory	no	no	no
Doctoral student in ED DESPEG	possible	Submit a project and supervise a Master Student	-	-
Doctoral student in ED SHAL	possible		-	-
Doctoral student in ED STIC	possible		-	-
ERASMUS Students	possible (under conditions)	possible (under conditions)	-	-

# DS4H Options – ERASMUS Students

Your Curriculum	Initial Training		Apprenticeship	
	Minors	Projects	Minors	Projects
M1 Informatique	possible	mandatory	no	no
M1 Informatique parcours IA	possible	mandatory	no	no
M2 informatique EiT Digital	possible	no	-	-
M2 informatique, except Ubinet	mandatory	no	no	no
M2 informatique Ubinet	possible	no	-	-
M1 MIAGE	no	no	no	no
M2 MIAGE NUMRES	mandatory	no	no	no
M2 MIAGE SIRIS	mandatory	no	no	no
M2 MIAGE MBDS	mandatory (minor or project)		no	no
M2 MIAGE IA2	mandatory (minor or project)		no	no
M1 Electronique	possible	possible	no	no
M2 Electronique	possible	possible	no	no
M1 Stratégie Digitale	possible	possible	possible	possible
M2 Stratégie Digitale	possible	possible	possible	possible
M1 Droit des affaires	possible	possible	-	-
M2 Droit de la PI et des nouvelles technologies	mandatory	possible	no	no
M1 Psychologie ECTN	mandatory	no	no	no
M1 HIC MAJIC	possible	no	no	no
M2 HIC MAJIC	possible	no	no	no
M1 HIC MAPIC	<div style="border: 2px solid red; padding: 10px; text-align: center;"> <p>Check your learning agreement Contact Thomas Veitschegger</p> </div>		possible	no
M2 HIC MAPIC			possible	no
M1 Sciences du langage	<div style="border: 2px solid red; padding: 10px; text-align: center;"> <p>Check your learning agreement Contact Thomas Veitschegger</p> </div>		no	no
M2 Sciences du langage, TAT			no	no
M1 LEA LAI RFI	<div style="border: 2px solid red; padding: 10px; text-align: center;"> <p>Check your learning agreement Contact Thomas Veitschegger</p> </div>		no	no
M1 LEA TRE			no	no
Doctoral student in ED DESPEG	<div style="border: 2px solid red; padding: 10px; text-align: center;"> <p>Check your learning agreement Contact Thomas Veitschegger</p> </div>		-	-
Doctoral student in ED SHAL			-	-
Doctoral student in ED STIC			possible	possible
<b>ERASMUS Students</b>	possible (under conditions)	possible (under conditions)	-	-

# How to enrol in a Minor / a Project?



**Check out for registration procedures with Virginie Valot  
at the end of the meeting**

# Make your wishes

**before September 16th (23h00)**

## Master Students

According to your training

**select**

**3 minors** (in order of preference)

**and/or**

**1 project**

on EREBE or via your Master's coordinator

## Doctoral Students

**Select 1 minor**

On ADUM

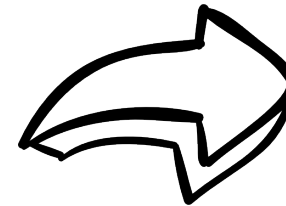
**APPRENTICES: No access to DS4H offer  
apart for M1 + M2 SD / M1 + M2 HIC MAPIC**



# All you need to know is on DS4H WISHES Portal



<https://ds4h.univ-cotedazur.fr/wishes>



[Online Demo](#)

**12h20-13h30**

**Fall 2024**

**DS4H Minors Offer**

**For Master  
and Doctoral  
Students**

<https://ds4h.univ-cotedazur.eu/minors>

# DS4H Minors in a nutshell

- Additional courses to access new disciplines alongside your major
- For Master students and PhD candidates
- 3 ECTS
- Usually on Thursday mornings
  - from Oct 10 to Dec 12
  - Possibly online
  - Possibly full week (January 13-17)
- Low prerequisite \*
- In English

<https://ds4h.univ-cotedazur.eu/minors>

# DS4H Minors

## Fall 2024 offer

<https://ds4h.univ-cotedazur.eu/minors>

- For Master and PhD Candidates
- One minor / semester (3 ECTS)
- On Thursday mornings (usually)
- In English
- Low prerequisites (check it!)

### Technical

- Quantum Technologies
- Web Technologies / Javascript intro
- AI and Video Games

### Business

- Digital IP and Law
- Digital Strategy
- Website creation Workshop

### Digital Culture

- Technological challenges in the IoT domain
- ICT and Environment
- Anthropology and Ethics of Technics

### Soft Skills

- Innovation and Creativity
- Innovation and Design Thinking
- Introduction to Scientific Research
- Organize your activity in project mode (full week)

# DS4H Minors

## Fall 2024 offer

<https://ds4h.univ-cotedazur.eu/minors>

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MINOR

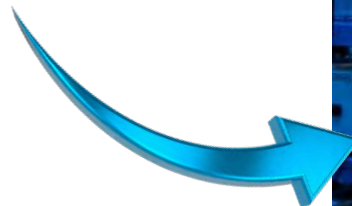
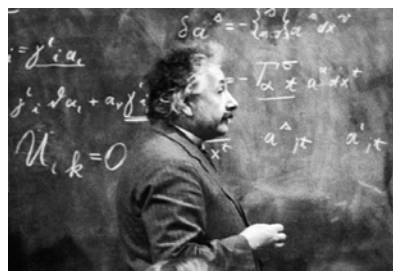
# Quantum Technologies

Virginia D'Auria  
& Olivier Alibert



## Spend your skills in Quantum applications

A physicist business?



A disruptive technology!!!

computing, cybersecurity, finance, chemistry,  
fundamental sciences, sensing...



(\$106b market size in 2040, national sovereignty, societal impact...)



## A Quantum talent gap!

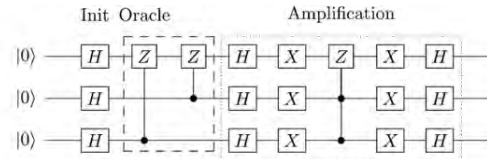


### Groover search algorithm : *an exemple from last year's students*

Unstructured search :



*Q. Techs*  
**Mathematicians:** evaluate classical limits  $O(N)$   
**Q Physicists, mathematicians:** translate it into a Q.problem  $O(\sqrt{N})$



*Q. Techs*  
**Computer scientist, maths, physicists:** code the Q. algorithm



*Q. Eng.*  
**Material scientists, physicists, system engineers, electronicists, data analysts.... :** implement it in a Q. computer

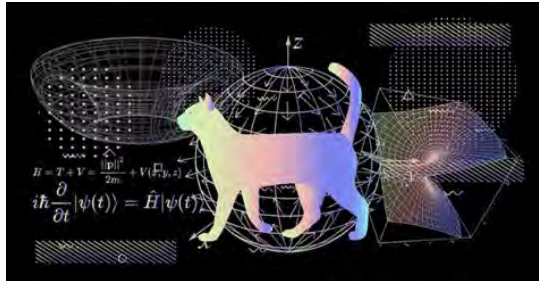
*Q. Engineering/ Q. Technos*  
**Chemists, economists, astrophysicists, mathematicians, geologists, engineers.... :** apply it to practical cases!!

**Q. Minors: Add your CV competences spendable in Q. market**

MINOR

# Quantum Technologies

Virginia D'Auria  
& Olivier Alibert



FORMAT

Classroom+Workshop

LOCATION

Campus Valrose

PREREQUISITES

- Basic linear algebra,
- English level: B1

CAPACITY

20 students

## WHAT YOU'LL LEARN?

- Understand the principle (and formalism) of main Q. technos.
- Understand why and how Q. Technos can interest your main discipline
- Understand how your discipline stimulates or enables the development of Q. Technos

### 5 sessions : introductory CM

- Learn Q. techno language
- Understand operational Q. Technos
- Know Q. technos panorama

&

### 3 sessions : Workshop

*Case studies chosen (and presented) by students*





Certificate  
**Quantum  
Aware**



DIGITAL SYSTEMS  
FOR HUMANS  
GRADUATE SCHOOL AND RESEARCH



FORMAL, PHYSICAL AND  
ENGINEERING SCIENCES  
GRADUATE SCHOOL AND RESEARCH



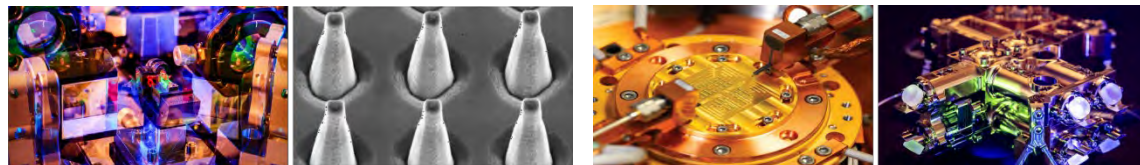
QuantEdu-France  
(57 M€ for Q.education)



**Combine different types of actions to progressively boost your Q. skills**



- 🎯 Diversified, complementary training modules
- 🎯 A flexible path, mainly built by the student
- 🎯 Strong links with Q. research in academy and industry
- 🎯 Possibility to access to Q. actions from other partners



A clear presentation of the skills you have acquired, enabling you to enrich your diploma



***Free to EURs DS4H & Spectrum master students and PhDs***

# Certificate Quantum Aware



DIGITAL SYSTEMS  
FOR HUMANS  
GRADUATE SCHOOL AND RESEARCH



FORMAL, PHYSICAL AND  
ENGINEERING SCIENCES  
GRADUATE SCHOOL AND RESEARCH



QuantEdu-France  
(57 M€ for Q.education)



## Combine different types of actions to progressively boost your Q. skills

### A. Course

Majors or  
Minors Q.:

- Q. Technologies
- Q. Engineering
- Q. Computing

(3 ECTS/course)

### B. Internships

In Academy or in  
Q. industry

*Including  
interdisciplinary  
topics*

(3 to 6 ECTS)

EURs & QEdU-France  
calls for scholarships

### C. Seminars

Fundamental &  
applied themes



QuantAzur  
Institute

(2 ECTS/cycle)

### C. Events

Summer Schools;  
Hackatons; Workshops

*Spring/Summer 2024  
≈ 30 schools all over EU*

(2 ECTS/event)

### C. Q. Weeks

One week of full  
immersion

*Starting in 2025*

(2 ECTS/week)

Possibility to apply for QuantEdu-France  
mobility grants



**Master Students: 10 ECTS over 2 years**

**PhDs: 7 ECTS over 3 years**

*Inscriptions and detailed modalities on the certification website*

MINOR

# Quantum Technologies

Virginia D'Auria  
& Olivier Alibert



## SCHEDULE

Date	Time slot	Course title	Lecturer	Room
10/10/2024	9h00-12h00	Practical quantum technologies, general concepts and case studies	Virginia D'Auria	Campus Valrose, Petit Valrose, room PV11
17/10/2024	9h00-12h00	Introduction to quantum technologies formalism	Virginia D'Auria	Campus Valrose, Petit Valrose, room PV11
24/10/2024	9h00-12h00	Quantum communications and quantum cryptography	Olivier Alibert	Campus Valrose, Petit Valrose, room PV11
7/11/2024	9h00-12h00	Practical quantum internet	Olivier Alibert	Campus Valrose, Petit Valrose, room PV11
14/11/2024	9h00-12h00	Quantum computing and quantum simulators / Discussion on chosen articles	Olivier Alibert	Campus Valrose, Petit Valrose, room PV11
21/11/2024	9h00-12h00	Workshop on chosen case studies / Bibliography research	Virginia D'Auria, Olivier Alibert	Campus Valrose, Petit Valrose, room PV11
28/11/2024	9h00-12h00	Workshop on chosen case studies / Discussion on chosen articles / Bibliography research	Virginia D'Auria, Olivier Alibert	Campus Valrose, Petit Valrose, room PV11
12/12/2024	9h00-12h00	Workshop on chosen case studies / Evaluation: Students' presentation	Virginia D'Auria, Olivier Alibert	Campus Valrose, Petit Valrose, room PV11

MINOR

# Web Technologies (Javascript introduction)

Coordinator:  
Michel BUFFA



## FORMAT

Online courses and  
live tutorial  
sessions

## LOCATION

Online

## PREREQUISITES

HTML basics  
M1 Computer  
Science students  
will have custom  
projects

## CAPACITY

Up to 60 students

## WHAT YOU'LL LEARN?

- How to add JavaScript (JS) code in your Web site/Web app, how to debug it
- How to make interactive Web sites through the DOM API
- How to change the CSS styles of HTML5 elements from JavaScript
- How to deal with HTML5 forms
- How to make basic graphics and animations using the HTML5 canvas
- How to use the basic concepts of ES2021, the last iteration of the language: arrays, functions, loops, basic objects

## CONTENTS

- Module 1: Introduction to JavaScript
- Module 2: Adding interactivity to HTML
- Module 3: Playing with HTML5
- Module 4: Structuring data
- Module 5: Working with forms



**FREE CERTIFICATION W3C obtained  
(value 200 euros/dollars) if you succeed !**

MINOR

# Web Technologies (Javascript introduction)

Coordinator:  
Michel BUFFA



## SCHEDULE

Date	Time slot	Room
10/10/2024	18h00-19h00	Online Zoom session
17/10/2024	18h00-19h00	Online Zoom session
24/10/2024	18h00-19h00	Online Zoom session
7/11/2024	18h00-19h00	Online Zoom session
14/11/2024	18h00-19h00	Online Zoom session
21/11/2024	18h00-19h00	Online Zoom session
28/11/2024	18h00-19h00	Online Zoom session
5/12/2024	18h00-19h00	Online Zoom session

- **Continuous support by email and private chat.**
- **Computer Science Students (Master Informatique): due to a stronger Computer Science background, you will have custom projects.**

MINOR

# AI and Video Games

Coordinator:  
David-Olivier Saban



## FORMAT

Classroom

## LOCATION

Campus SophiaTech  
(Lucioles)

## PREREQUISITES

Programming  
C# is preferred for Unity

## CAPACITY

15 DS4H students

## WHAT YOU'LL LEARN?

- General introduction to AI
- Understanding the concrete uses of automation in Video Games
- Knowing the algorithms and their uses and limits
- Practicing the techniques of AI programming for Video Games
- Use Prompting to help you create your games



MINOR

# AI and Video Games

Coordinator:  
David-Olivier Saban



## SCHEDULE

Date	Time	Course title	Location / room
10/10/2024	9h00-12h00	About Artificial Intelligence	Campus SophiaTech, Lucioles, room 342
17/10/2024	9h00-12h00	Path Finding Step 1	Campus SophiaTech, Lucioles, room 342
24/10/2024	9h00-12h00	Modeling & Algorithms	Campus SophiaTech, Lucioles, room 342
07/11/2024	9h00-12h00	About GenAI and Prompting	Campus SophiaTech, Lucioles, room 342
14/11/2024	9h00-12h00	Pathfinding Step 2	Campus SophiaTech, Lucioles, room 342
21/11/2024	9h00-12h00	Complexity	Campus SophiaTech, Lucioles, room 342
28/11/2024	9h00-12h00	Deep Learning and LLMs	Campus SophiaTech, Lucioles, room 342
05/12/2024	9h00-12h00	More prompting + Exam	Campus SophiaTech, Lucioles, room 342

LECTED

# DS4H Minors

## Fall 2024 offer

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- For Master and PhD Candidates
- One minor (3 ECTS)
- On Thursday mornings (usually)
- In English
- Low prerequisites (check it!)

### Technical

- Quantum Technologies
- Web Technologies / Javascript intro
- AI and Video Games

### Business

- Digital IP and Law
- Digital Strategy
- Website creation Workshop

### Digital Culture

- Technological challenges in the IoT domain
- ICT and Environment
- Anthropology and Ethics of Technics

### Soft Skills

- Innovation and Creativity
- Innovation and Design Thinking
- Introduction to Scientific Research
- Organize your activity in project mode (full week)



MINOR

# Digital Intellectual Property and Law

Coordinator:  
Frédéric Marty



FORMAT

Classroom

LOCATION

Campus Trotabas

PREREQUISITES

No

CAPACITY

20 students

## WHAT YOU'LL LEARN?

- Acquire essential knowledge about **the legal, economic, and managerial issues induced by digital markets and the algorithms-driven economy**
- Master fundamental notions of **data protection law, consumer law, and competition law applied**
- Discover basic notions necessary to understand and appropriate economic science and management sciences concepts, models, and insights to analyze the incentives of market players and the dynamics of digital markets



MINOR

# Digital Intellectual Property and Law

Coordinator:  
Frédéric Marty



## SCHEDULE

Date	Time slot	Course title	Lecturer	Room
07/11/2024	8h00-12h00	Digital Markets and coordinated practices	Frédéric Marty	Campus Trotabas, Villa Passiflore room 14
14/11/2024	8h00-12h00	Competition Law and Digital Markets	Nathalie Nielson	Campus Trotabas, Villa Passiflore room 14
21/11/2024	8h00-12h00	Consumer protection and digital manipulations	Jeanne Mouton	Campus Trotabas, Villa Passiflore room 14
28/11/2024	8h00-12h00	Consumer protection and digital manipulations	Jeanne Mouton	Campus Trotabas, Villa Passiflore room 14
05/12/2024	8h00-12h00	Competition Law and Digital Markets	Nathalie Nielson	Campus Trotabas, Villa Passiflore room 14
12/12/2024	8h00-12h00	Digital Markets and coordinated practices	Frédéric Marty	Campus Trotabas, Villa Passiflore room 14

MINOR

# Digital Strategy

Coordinator:  
Lise Arena



FORMAT

Classroom

LOCATION

Campus Saint Jean  
d'Angely

PREREQUISITES

No

CAPACITY

25 students



## WHAT YOU'LL LEARN?

- Identify what degree (maturity) of digital transformation a project could have.
- Acquire the fundamentals in project management through the analysis of real case-studies.
- Develop a critical perspective on digital transformation.
- Convince an audience while presenting a project

MINOR

# Digital Strategy

Coordinator:  
Lise Arena



## SCHEDULE

Date	Time slot	Course title	Room
10/10/2024	10h00-13h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
17/10/2024	10h00-13h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
24/10/2024	10h00-13h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
07/11/2024	9h00-12h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
14/11/2024	9h00-12h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
21/11/2024	9h00-12h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
28/11/2024	9h00-12h00	Digital Strategy	Campus Saint Jean d'Angély / SJA1 room 211
05/12/2024	10h00-13h00	Evaluation	Campus Saint Jean d'Angély / SJA1 room 211

MINOR

# Website Creation Workshop

Coordinator:  
Nicolas Fogliarini (RR3 Films)



## FORMAT

Classroom + online  
synchronous sessions

## LOCATION

Campus Valrose or  
online depending on  
the session (see  
schedule)

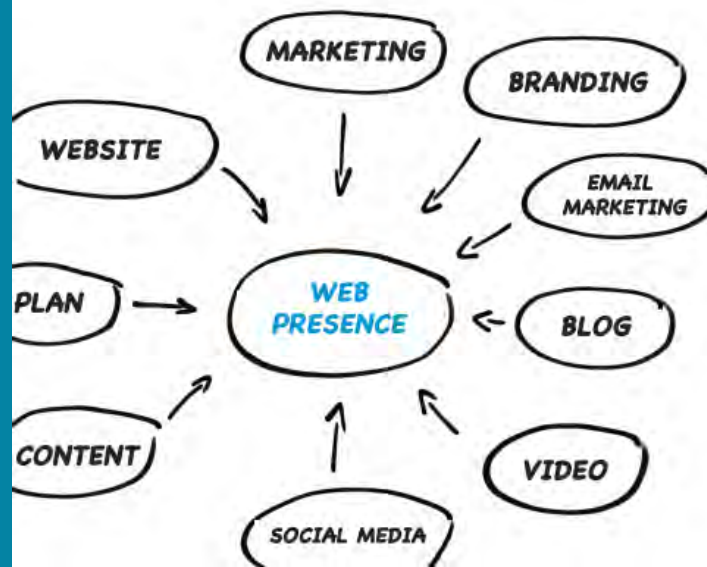
## PREREQUISITES

No

## CAPACITY

20 students

This minor is dedicated  
to beginners, not website  
specialists.



## WHAT YOU'LL LEARN?

- How to **showcase the best of your work**, skills through various medias : websites, online portfolios, blogs, social networks.
- How to **create assets** (posts, photos, videos, graphics, podcasts...) using free tools and their smartphones + computers.
- How to improve your online presence and learn how to avoid pitfalls.
- How to collaborate effectively online using video conference.

MINOR

# Website Creation Workshop

Coordinator:  
Nicolas Fogliarini (RR3 Films)



[Watch the video](#)

MINOR

# Website Creation Workshop

Coordinator:  
Nicolas Fogliarini (RR3 Films)



## SCHEDULE

Date	Time slot	Course title	Room
10/10/2024	9h00-13h00	Introduction on various online portfolio's platforms	Campus Valrose, Petit Valrose, room PV111
	18h00-19h00	Focus on Google My Business	Online live tutorial session
17/10/2024	9h00-13h00	Preparation work and wordpress intro	Campus Valrose, Petit Valrose, room PV111
	18h00-19h00	A website that converts	Online live tutorial session
07/11/2024	9h00-13h00	Creating content	Campus Valrose, Petit Valrose, room PV111
	18h00-19h00	Focus on right clearance	Online live tutorial session
14/11/2024	9h00-13h00	Working with themes and plugins, uploading, security...	Campus Valrose, Petit Valrose, room PV111
	18h00-19h00	Focus on SEO	Online live tutorial session
21/11/2024	9h00-13h00	Working on your own online portfolio last details + Exam	Campus Valrose, Petit Valrose, room PV111

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- Innovation and Design Thinking
- Introduction to Scientific Research
- Organize your activity in project mode (full week)



MINOR

# Technological Challenges in the IoT Domain

Coordinator:  
Yves Roudier



## WHAT YOU'LL LEARN?

- **Technical understanding about the issues underlying the lifecycle of Internet of Things systems**
- **Basic knowledge and hands-on experience about technical solutions for the design, development, and operations of Internet of Things systems**

## FORMAT

Classroom + online synchronous sessions

## LOCATION

Campus SophiaTech, Lucioles and online, depending on the session (see schedule)

## PREREQUISITES

No

## CAPACITY

20 students

## CONTENTS

Both technical and societal viewpoints:

- **Distributed infrastructures for connected objects**
- **Security and privacy for IoT**
- **Introduction to data valorization**
- **Hands-on experience with low-code deployment of a secure IoT application**

# INTERNET OF THINGS

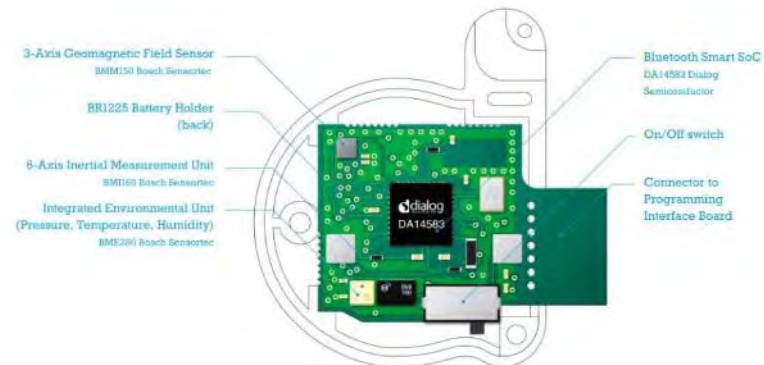
MINOR

# Technological Challenges in the IoT Domain

Coordinator:  
Yves ROUDIER



billy



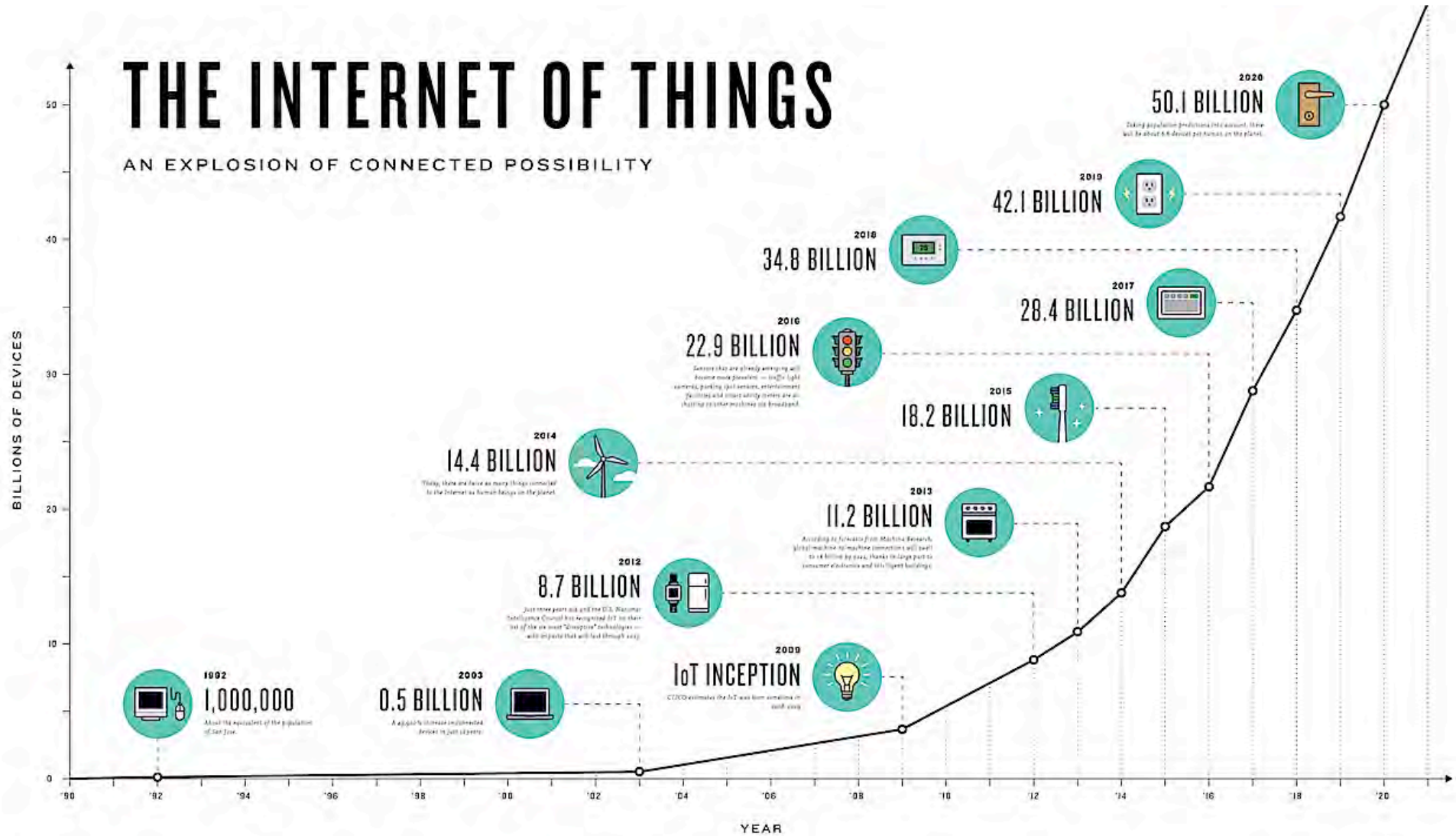
MINOR

# Technological Challenges in the IoT Domain

Coordinator:  
Yves ROUDIER



billy



MINOR

# Technological Challenges in the IoT Domain

Coordinator:  
Yves ROUDIER



## SCHEDULE

Date	Time slot	Course title	Lecturer	Room
10/10/2024	9h00-12h00	Security and privacy for IoT	Yves Roudier	Campus SophiaTech, Lucioles, room TD07
17/10/2024	9h00-12h00	Security and privacy for IoT	Yves Roudier	Campus SophiaTech, Lucioles, room TD07
24/10/2024	8h00-12h00	Distributed infrastructure for connected objects	Jean-Yves Tigli	Campus SophiaTech, Lucioles, room TD07
14/11/2024	9h00-12h00	Project	Jean-Yves Tigli and Yves Roudier	Campus SophiaTech, Lucioles, room TD07
21/11/2024	9h00-12h00	Distributed infrastructure for connected objects	Jean-Yves Tigli	Campus SophiaTech, Lucioles, room TD07
28/11/2024	9h00-12h00	Introduction to data valorization	Guilhem Molines	Online synchronous session
05/12/2024	9h00-12h00	Introduction to data valorization	Guilhem Molines	Online synchronous session
12/12/2024	10h00-12h00	Quizz + Project Defense	Jean-Yves Tigli and Yves Roudier	Campus SophiaTech, Lucioles, room TD07

MINOR

# ICT and Environment

(Internet and Environment)

Coordinators:

Guillaume URVOY-KELLER

Luc DENEIRE

# The origin

is

- Environment will become a key issue in every economic sector
- ICT, in any economic sector, has to take part to this global effort
- Hence the question:

Is ICT a cure or a curse  
for environment?



MINOR

# ICT and Environment (Internet and Environment)

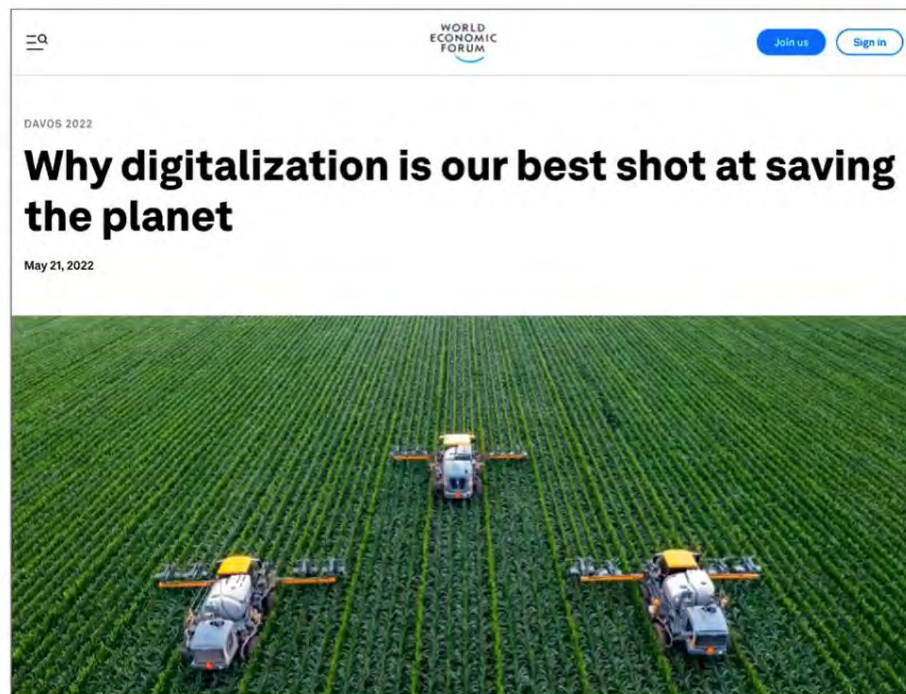
Coordinators:  
Guillaume URVOY-KELLER  
Luc DENEIRE



# Positive side : twin transitions

## Les transitions jumelles

Le secteur privé et les institutions publiques sont partis du principe que la numérisation contribuerait *par défaut* à la réussite de la transition écologique.



↑ World Economic Forum, 2022



↑ Gartner predictions, october 2022

← JRC / European Commission, 2022



↑ Digital Europe, 2021

Crédit : Gauthier Roussilhe – exposé : <https://labos1point5.org/les-seminaires/printemps-2023>

MINOR

# ICT and Environment

(Internet and Environment)

Coordinators:  
Guillaume URVOY-KELLER  
Luc DENEIRE



# Examples

## Energy sector

Le smartgrid est nécessaire pour stabiliser un réseau de distribution d'énergie mélangeant du renouvelable et du non renouvelable

## Agriculture

The use of sensors and AI will enable targeted and rational use of synthetic inputs (fertilizers, pesticides)

MINOR

# ICT and Environment (Internet and Environment)

Coordinators:  
Guillaume URVOY-KELLER  
Luc DENEIRE



## "Less Positive" side

- The objective should be to reduce CO<sub>2</sub> emissions --> **energy transition**
- .... and not to do a **digital transition**
- Especially as the emissions of ICT seem unbounded

Énergie primaire	Émissions de GES	Eau	Ressources
x2,9	x3,1	x2,4	x2,1

*Croissance des impacts environnementaux du numérique mondial, entre 2010 et 2025,  
GreenIT.fr, 2019*

CO<sub>2</sub> is not the impact factor to consider



MINOR

# ICT and Environment

(Internet and Environment)

Coordinators:

Guillaume URVOY-KELLER

Luc DENEIRE

## Our objective

- Assess the **carbon footprint** of ICT and the Internet
  - Based on state-of-the-art scientific studies
- Provide a holistic view of ICT: from **mineral** to **e-waste** (life cycle analysis)
- Discuss the basics of **eco-friendly software design** and **green algorithms**
- Beyond the pure technical perspectives: **law and digital world**



MINOR

# ICT and Environment

(Internet and Environment)

Coordinators:

Guillaume URVOY-KELLER

Luc DENEIRE



# Contents

- **Session 1 The Anthropocentric age**
- **Session 2 Background on Energy and ICT**
- **Session 3+4 Measuring ICT and Internet Footprint**
  - Hands-on session
- **Session 5 Green Algorithm Design**
- **Session 6 Eco-friendly software design**
  - Hands-on session
- **Session 7 Law, Environment and Digital world**
- **Session 8 Oral presentation of papers and open discussion**

MINOR

# ICT and Environment (Internet and Environment)

Coordinators:  
Guillaume URVOY-KELLER  
Luc DENEIRE



## SCHEDULE

Date	Time slot	Course title	Lecturer	Room
10/10/2024	9h00-12h00	The Anthropocentric age	Luc Deneire	Campus SophiaTech Templiers, Building B, room B203
17/10/2024	9h00-12h00	Background on Energy and ICT	Guillaume Urvoy-Keller	Campus SophiaTech Templiers, Building B, room B203
24/10/2024	9h00-12h00	Measuring ICT and Internet Footprint	Guillaume Urvoy-Keller	Campus SophiaTech Templiers, Building B, room B203
07/11/2024	9h00-12h00	Measuring ICT and Internet Footprint	Guillaume Urvoy-Keller	Campus SophiaTech Templiers, Building B, room B203
14/11/2024	9h00-12h00	Green Algorithm Design	Frédéric Giroire	Campus SophiaTech Templiers, Building B, room B203
21/11/2024	9h00-12h00	Eco-friendly software design	Guillaume Urvoy-Keller	Campus SophiaTech Templiers, Building B, room B203
28/11/2024	9h00-12h00	Law, Environment and Digital world	Mélanie Olivari	Campus SophiaTech Templiers, Building B, room B203
5/12/2024	9h00-12h00	Oral presentations of personal projects	Luc Deneire and Guillaume Urvoy-Keller	Campus SophiaTech Templiers, Building B, room B203

MINOR

# Anthropology and Ethics of Technics

Coordinator:  
Valentina TIRLONI



[Watch the video](#)

MINOR

# Anthropology and Ethics of Technics

Coordinator:  
Valentina TIRLONI



## FORMAT

Moodle  
asynchronous and  
synchronous live  
online tutorials

## LOCATION

Online

## PREREQUISITES

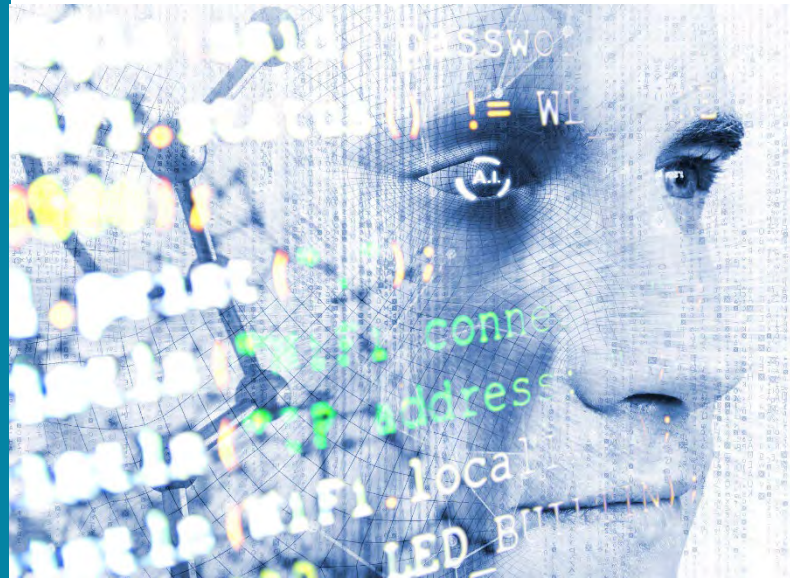
No

## CAPACITY

20 students

## WHAT YOU'LL LEARN?

- **This minor is designed to develop critical thinking on technological issues and to explore topics such as new sociability, transhumanism, and the ethical implications of technology.**
- **We will examine the impact of technology on human life, including the potential negative consequences and the loss of certain values.**
- **The course will be divided into four parts: Anthropological inquiry on Technics, Transhumanism, Philosophical inquiry on Technics, and an ethical approach to Technics.**



MINOR

# Anthropology and Ethics of Technics

Coordinator:  
Valentina TIRLONI



## SCHEDULE

Date	Time slot	Course title	Room
10/10/2024	18h00-19h00	Introduction	online synchronous
17/10/2024	18h00-19h00	Anthropological inquiry on Technics	on Moodle
24/10/2024	18h00-19h00	New sociability	on Moodle
07/11/2024	18h00-19h00	Transhumanism	on Moodle
14/11/2024	18h00-19h00	Philosophical inquiry on Technics	online synchronous
21/11/2024	18h00-19h00	Ethical Issues on Technics	on Moodle
28/11/2024	18h00-19h00	Politics and Technics: e-democracy	online synchronous
05/12/2024	18h00-19h00	Conclusions	on Moodle

# DS4H Minors

## Fall 2024 offer

<https://ds4h.univ-cotedazur.eu/minors>



- For Master and PhD Candidates
- One minor (3 ECTS)
- On Thursday mornings (usually)
- In English
- Low prerequisites (check it!)

### Technical

- Quantum Technologies
- Web Technologies / Javascript intro
- AI and Video Games

### Business

- Digital IP and Law
- Digital Strategy
- Website creation Workshop

### Digital Culture

- Technological challenges in the IoT domain
- ICT and Environment
- Anthropology and Ethics of Technics

### Soft Skills

- Innovation and Creativity
- Innovation and Design Thinking
- Introduction to Scientific Research
- Organize your activity in project mode (full week)

MINOR

# Innovation and Creativity

Coordinator:  
Cindy De Smet



## FORMAT

Online  
synchronous  
sessions +  
asynchronous

## LOCATION

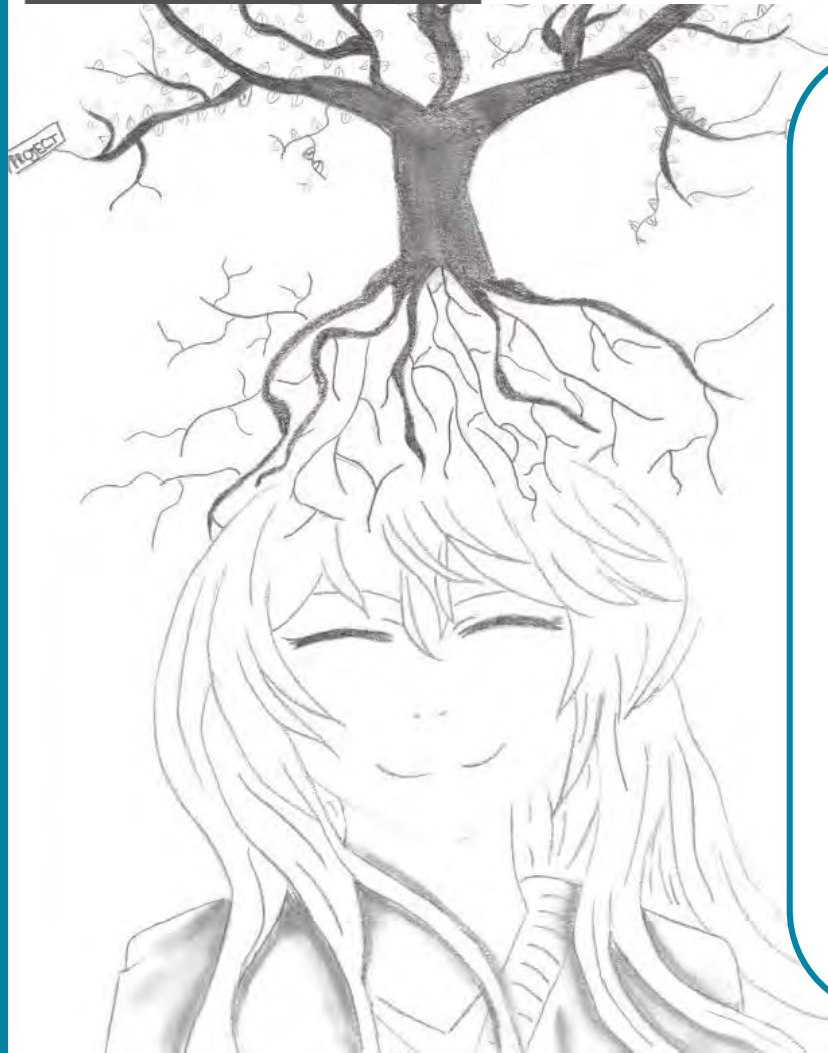
Moodle Learning  
Management  
System - Zoom

## PREREQUISITES

Minimum language  
skills in English

## CAPACITY

30 students



## WHAT YOU'LL LEARN?

- **Explore the existing creativity literature across multiple disciplines, and how it connects to innovation.**
- **Start a self-reflection on how to enhance your creative abilities.**
- **Learn how visualization as a cognitive process, can help you generate better ideas**
- **Learn how collaboration can help you produce more qualitative ideas**
- **Introduction to the intersections between critical thinking and creativity, and the influence of artificial intelligence**



MINOR

# Innovation and Creativity

Coordinator:  
Cindy DE SMET



## SCHEDULE

Date	Time	Course title	Format/Location
10/10/2024	18h30-20h00	<b>Tutoring session 1</b>	Online
14/11/2024	18h30-20h00	<b>Tutoring session 2</b>	Online
05/12/2024	18h30-20h00	<b>Optional: Live recording self-reflection task. Possibility for task-related advice</b>	Online, by appointment

**MINOR**

# Innovation and Design Thinking

Coordinator:  
Nicolas BRUNO



## FORMAT

Classroom  
(workshops)

## LOCATION

Espace Vernassa,  
Campus Saint-Jean  
d'Angély, Nice

## PREREQUISITES

No

## CAPACITY

Variable according  
to the workshops

## CONTENTS

**This minor aims to train students in innovation, creativity and 21st century skills, while proposing solutions to the challenges faced by businesses and other organizations.**

**It's made up of several independent workshops, each of which teaches one skill. As part of your minor, you must choose 3 workshops from the following list.**

**!/ \ Each workshop is assessed.**



MINOR

# Innovation and Design Thinking

Coordinator:  
Nicolas BRUNO



## Design Thinking

Design Thinking is an innovation process based on the notion that, in order to innovate, *it's* necessary to connect with people, to understand the real needs of the user and to explore the whole context of the project with a constant attitude of research..

## Ai For Business

Ai For Business introduces the theme of artificial intelligence, focusing on three main areas: robotics, machine learning and natural language processing. An economic and management perspective is adopted to learn how to master this innovative technology and understand how it will shape our future!

## Entrepreneurship

The Entrepreneurship workshop invites you to discover the essential concepts of entrepreneurship, including the description of an entrepreneurial process, the profile of the entrepreneur and the role of business creation in society. You will also explore the mindset and methods of entrepreneurship, which will help you to identify interesting opportunities and develop innovative activities.

## Actions for Sustainability

Actions for Sustainability involves students in a responsible approach. It gives students the tools to understand their impact on society and the environment and provides them with the keys to more responsible entrepreneurship.

MINOR

# Innovation and Design Thinking

Coordinator:  
Nicolas BRUNO



## SCHEDULE

Choose 3 workshops out of 4

Date	Time slot	Workshops	Lecturer
17/10/2024	9h00-13h00	Actions for Sustainability	Lena Felderhoff
24/10/2024	9h00-13h00	Actions for Sustainability	Lena Felderhoff
07/11/2024	9h00-13h00	Design Thinking	Eric Guerci
14/11/2024	9h00-13h00	Design Thinking	Eric Guerci
21/11/2024	9h00-13h00	AI for Business	Eric Guerci
28/11/2024	9h00-13h00	Entrepreneurship	Olga Pabion
05/12/2024	9h00-13h00	Entrepreneurship	Olga Pabion
12/12/2024	9h00-13h00	AI for Business	Eric Guerci

MINOR

# Innovation and Design Thinking

Coordinator:  
Nicolas BRUNO



## Let's stay in touch!



@unica\_entreprendre



entreprendre.univ-cotedazur.fr



@UniCA Entreprendre



entreprendre@univ-cotedazur.fr

MINOR

# Introduction to Scientific Research

Coordinator:  
Gilles BERNOT



FORMAT

Classroom

LOCATION

Campus  
SophiaTech

PREREQUISITES

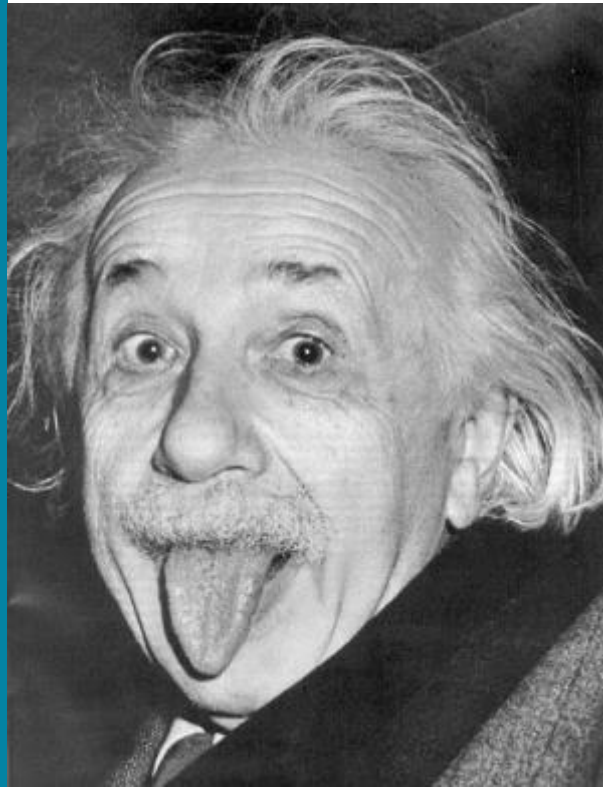
No

CAPACITY

24 students

## WHAT YOU'LL LEARN?

- **How to conduct research, and more generally how to approach a subject rationally**
- **Take a critical view on the literature available on the subject**
- **Provide your own reflections supported by experience and communicate them**
- **The hindsight that this course provides on what science is (or is not) should be part of the skills of any scientist, not only researchers.**



MINOR

# Introduction to Scientific Research

Coordinator:  
Gilles BERNOT



## SCHEDULE

Date	Time slot	Lecturers	Course title	Location
10/10/2024	9h00-12h15	9h00-9h15 - Gilles Bernot	Welcome, Course goals and outline, evaluation modalities	SophiaTech Templiers, room B107
		9h15-10h45 - Eric Picholle	Epistemology, "What is science?"	
		11h00-12h15 - Anne-Laure Simonelli	Research: a job of passion	
17/10/2024	9h00-12h15	9h00-10h30 - Hui-Yin Wu	Methods for conducting research - Bibliography 1	SophiaTech Templiers, room B107
		10h45-12h15 - Sid Touati	Bibliography 2	
24/10/2024	9h00-12h15	9h00-9h30 - Gilles Bernot	Bibliographic analysis on a given list of articles	SophiaTech Templiers, room B107
		9h45-12h15 - Fabien Ferrero	Scientific writing	
07/11/2024	9h00-12h15	Sid Touati	Experimentation workshop: Statistical aspects of experimentation	SophiaTech Templiers, room B107
14/11/2024	9h00-12h15	Hui-Yin Wu	Experimentation workshop: Human-Computer Interaction	SophiaTech Templiers, room B107
21/11/2024	9h00-12h15	9h00-10h30 - Nadia Abchiche	Digital Deontology	SophiaTech Templiers, room B107
		10h45-12h15 - Gilles Bernot	Article analysis: last questions	
28/11/2024	9h00-12h15	9h00-10h30 - Fabien Ferrero	Scientific collaborations	SophiaTech Templiers, room B107
		10h45-12h15 - Anne-Laure Simonelli	PhD and its career opportunities	
05/12/2024	8h00-12h30	Jury	Evaluation	SophiaTech Templiers, room B107

Full week

# Organize Your Activity in Project Mode

Coordinator:  
Emmanuel LE ROY



[Watch the video](#)



Full week

# Organize Your Activity in Project Mode

Coordinator:  
Emmanuel LE ROY



## FORMAT

Classroom

## LOCATION

Campus  
SophiaTech,  
Lucioles

## PREREQUISITES

No

## CAPACITY

12 students

## CONTENTS

- Introduction to project management
- The golden triangle of project management
- Managing costs and schedules
- Managing communication
- Managing budget
- Managing risks and quality
- Managing uncertainty with agility

## WHAT YOU'LL LEARN?

- How to formalize and idea in a project and make a first assessment about its feasibility.
- How to define the initial scope of your project with the budget and the time needed to make it happen.
- How to identify risks and how to manage them.
- How to control the quality along your project.
- How to manage people and monitor cost, time and scope along your project.
- Why communication is essential to the success of a project and how to do it properly.
- How to close your project properly while collecting information to make your next project even more successful.

Full week

# Organize Your Activity in Project Mode

Coordinator:  
Emmanuel LE ROY



## SCHEDULE: JAN 13 > JAN 17

Date	Time slot	Course title	Location
13/01/2025	9h30-12h30	Introduction to project management	Campus SophiaTech, Lucioles, room TD07
	14h00-17h00	Project life cycle and different types of projects	Campus SophiaTech, Lucioles, room TD07
14/01/2025	9h30-12h30	Managing costs and schedules (part 1)	Campus SophiaTech, Lucioles, room TD07
	14h00-17h00	Managing costs and schedules (part 2)	Campus SophiaTech, Lucioles, room TD07
15/01/2025	9h30-12h30	Managing risks	Campus SophiaTech, Lucioles, room TD07
	Afternoon	Students can finalize their project charter on Wednesday afternoon	
16/01/2025	9h30-12h30	Managing a project in Agile (part 1)	Campus SophiaTech, Lucioles, room TD07
	14h00-17h00	Managing a project in Agile (part 2)	Campus SophiaTech, Lucioles, room TD07
17/01/2025	9h30-12h30	Project closing – Final exam	Campus SophiaTech, Lucioles, room TD07

# Where to find Fall 2024 Minors

**MINORS**  
Tutorships  
PROJECTS

**WISHES**  
DS4H option wishes selection platform

<https://ds4h.univ-cotedazur.eu/wishes>

Or flash this QR code



## 2 - FIND OUT ABOUT FALL 2024 SEMESTER OPTIONS

DS4H Fall 2024 minors and projects selection will take place from September 12 to September 16 (23h00).  
Do not miss the presentation meeting on September 12, 2024 from 12 to 3 pm. Find out more...

WHICH DS4H OPTIONS FOR WHICH STUDENTS?	MINORS / THEMATIC SCHOOLS	PROJECTS
	<p>What is a DS4H minor? What is a DS4H thematic school?</p>	<p>What is a DS4H project?</p>
YOU'RE A MASTER STUDENT	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Minors</li><li>• Thematic school</li></ul>	<p>Discover the research projects open in Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Tutorships</li><li>• Multidisciplinary Research Projects</li><li>• HIC Creativity Projects</li></ul>
YOU'RE A PhD CANDIDATE	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Minors</li><li>• Thematic school</li></ul>	<p>PhD candidates can take part in DS4H projects as supervisors:</p> <ul style="list-style-type: none"><li>• Submit a project and supervise a Master Student</li></ul>

# Q&A

with minor coordinators

# 13h30-14h00

## Fall 2024

## Projects

## Offer

**For Master  
Students**

<https://ds4h.univ-cotedazur.eu/projects>

# DS4H Projects offer

- For Master Students
- You choose one project/semester (3 or 6 ECTS)
- Total of ~ 90h

<https://ds4h.univ-cotedazur.eu/projects>

## RESEARCH PROJECTS

### Research Projects in Tutorship



Tutorships provide training  
to research  
Immerse yourself in a lab.

### Multidisciplinary Research Projects



Join a team of students  
from different disciplines  
working on a shared topic.

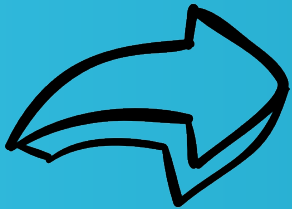
### HIC - Creativity Multidisciplinary Projects



Take part in the  
development of a video  
game.

# DS4H Research Projects in a nutshell

- Run individual and group projects to sharpen your professional objectives!
- (3 to) 6 ECTS
- One day / week for a minimum of 8 weeks
- + one full week immersion (16-20 December)



[See the research projects open this semester](#)



UNIVERSITÉ CÔTE D'AZUR | ÉCOLE UNIVERSITAIRE DE RECHERCHE  
SYSTÈMES NUMÉRIQUES POUR L'HUMAIN

# MASTER RESEARCH PROJECTS

...in a nutshell



[Watch the video](#)



# Where to find Fall 2024 Research Projects



**WISHES**  
DS4H option wishes selection platform

<https://ds4h.univ-cotedazur.eu/wishes>

Or flash this QR code



*billy*

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	<p>What is a DS4H minor? What is a DS4H thematic school?</p>	<p>What is a DS4H project?</p>
YOU'RE A MASTER STUDENT	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"> <li>• Minors</li> <li>• Thematic school</li> </ul>	<p>Discover the research projects open in Fall 2024 semester:</p> <ul style="list-style-type: none"> <li>• Tutorships</li> <li>• Multidisciplinary Research Projects</li> <li>• HIC Creativity Projects</li> </ul>
YOU'RE A PhD CANDIDATE	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"> <li>• Minors</li> <li>• Thematic school</li> </ul>	<p>PhD candidates can take part in DS4H projects as supervisors:</p> <ul style="list-style-type: none"> <li>• Submit a project and supervise a Master Student</li> </ul>

# DS4H Research Projects



[See the open projects this semester](#)

## Tutorships and multidisciplinary projects browser

You can discover tutorships and multidisciplinary projects proposed here. Project selection will start on September 15, 2023.

If you are interested in a subject, **get in touch with the advisor by email.**

Tutorships allocations depend on the agreement of the advisor regarding the student profile.

Multidisciplinary projects allocation depend on the constitution of the multidisciplinary team

2024-2025 1st semester

**Make sure you're on the right semester!**

Type of research project

- Tutorship
- <Any type>
- Tutorship
- Multidisciplinary project

Domain

	Domain(s)	Advisor	Title
Tutorship	Computer Science	<a href="#">CHUAN XU</a> (INRIA)	<a href="#">Differential privacy and byzantine resilience in federated learning</a>
Tutorship	Computer Science	<a href="#">Anaïs Ollagnier</a> (I3S)	<a href="#">Advanced metrics to search within ontology catalogs</a>
Tutorship	Computer Science	<a href="#">Daniel Gaffé</a> (LEAT)	<a href="#">Symbolic handling of numerical constraints by Linear Decision Diagrams (LDD)</a>
Tutorship	Electronics	<a href="#">Daniel gaffé</a> (LEAT)	<a href="#">Model Checking by Linear Decision Diagrams (LDD)</a>
Tutorship	Computer Science	<a href="#">Anaïs Ollagnier</a> (I3S)	<a href="#">High-Level Taxonomy of NLP tasks</a>
Tutorship	Computer Science	<a href="#">Anaïs Ollagnier</a> (I3S)	<a href="#">Improving Hate Speech Detection Using Pragmatic-Level Information</a>
Tutorship	Computer Science	<a href="#">Anaïs Ollagnier</a> (I3S)	<a href="#">Assessing Hate speech/offensive detection robustness</a>
Tutorship	Computer Science	<a href="#">Sid Touati</a> (I3S/INRIA)	<a href="#">A la découverte de la programmation parallèle avec OpenMP</a>
Tutorship	Computer Science	<a href="#">Gaetan Rey</a> (I3S)	<a href="#">Contexte Utilisateur et Réalité Augmentée/Mixte</a>
Tutorship	Computer Science	<a href="#">Michel BUFFA</a> (I3S)	<a href="#">Amélioration d'un sampler audio logiciel fonctionnant sous forme de plugin WebAudio (dans navigateur Web)</a>
Tutorship	Computer Science	<a href="#">Michel BUFFA</a> (I3S)	<a href="#">Ajout de fonctionnalités dans un sequencer audio en ligne / station de travail audio numérique</a>
Tutorship	Computer Science	<a href="#">Chadi Barakat</a> (Diana)	<a href="#">Mining the ACQUA dataset and improving the application</a>

Subject

# Meet some research projects supervisors

- Guillaume Urvoy Keller – [guillaume.urvoy-keller@univ-cotedazur.fr](mailto:guillaume.urvoy-keller@univ-cotedazur.fr)  
« Quel impact le changement climatique peut avoir sur les réseaux informatiques? »
- Nadia Abchiche - [nadia.abchiche@univ-cotedazur.fr](mailto:nadia.abchiche@univ-cotedazur.fr)  
« Computational approach to synchronize circadian clocks »
- Michel Barlaud – [michel.barlaud@univ-cotedazur.fr](mailto:michel.barlaud@univ-cotedazur.fr)  
« Sparsification of neural networks for improving complexity and interpretability »
- Denis Pallez – [denis.pallez@univ-cotedazur.fr](mailto:denis.pallez@univ-cotedazur.fr)  
« Coupling a standard problem API with an artificial intelligence algorithm (MCTS) »  
« Studying the efficiency of Eye-tracking techniques in real-time optimization tasks »
- Jean-Yves Dauvignac – [jean-yves.dauvignac@univ-cotedazur.fr](mailto:jean-yves.dauvignac@univ-cotedazur.fr)  
« Caractérisation d'une antenne miniature ultra large bande en polarisation circulaire : application à la détection de canalisations »

# Climate impact on ICT

Research in tutorship

G. Urvoy-Keller, J. Moulhierac

Guillaume Urvoy-Keller – [guillaume.urvoy-keller@univ-cotedazur.fr](mailto:guillaume.urvoy-keller@univ-cotedazur.fr)

# Brief state of the art

- Hot topic for government since almost a decade
- ....
- Some research papers pop up regularly

# Exploring impacts of climate change on UK's ICT infrastructure

*Infrastructure Asset Management 2016, 3(1), 42-52*

**1 Gaihua Fu** BSc, PhD

Centre for Earth Systems Engineering Research, School of Civil Engineering and Geosciences, Newcastle University, Newcastle upon Tyne, UK (corresponding author: gaihua.fu@ncl.ac.uk)

**2 Lisa Horrocks** BA, PhD

Principal Consultant, Ricardo Energy & Environment, Harwell, Didcot, Oxfordshire, UK

**3 Sarah Winne** BA, MSc

Senior Consultant, Ricardo Energy & Environment, Harwell, Didcot, Oxfordshire, UK

- Several results from « The workshop was undertaken as part of a UK government programme for adapting national infrastructure : »
  - **What risks (in general) will become present and/or increase?**
  - **What risks related to weather/climate will emerge or reduce?**
  - **How is resilience currently built into ICT infrastructure** (and plans for the future)?
  - **How does the regulatory regime enable/inhibit resilience?**

# Direct risks

- The challenge is rooted **not in ICT devices themselves but in the environmental conditions that surround them** and the impact of weather events.
- Extreme precipitation
  - Radio links are engineered to 99.99% average annual availability, and so they fail for about 50 min a year **in moderate rain rates of about 25 mm/h** (Bacon, 2012; Paulson, 2010, 2011).

# Risk from cross-sectoral interdependencies

- ICTs provide a critical operational service for much of the UK transport infrastructure, from **road information** on the motorway network to **air traffic control**.  
→ potential to result in multisectoral 'cascade failures'.
- Fragmentation of governance of the UK NI means that '**no-one has any responsibility or accountability for looking across the NI as a whole**'



# ICT and energy

- ICT sector has a relatively low dependency on other sectors for its continuing operation, but is **completely dependent on energy**

Letter | [Published: 15 April 2010](#)

## **Catastrophic cascade of failures in interdependent networks**

[Sergey V. Buldyrev](#) , [Roni Parshani](#), [Gerald Paul](#), [H. Eugene Stanley](#) & [Shlomo Havlin](#)

[Nature](#) **464**, 1025–1028 (2010) | [Cite this article](#)

**32k** Accesses | **2970** Citations | **99** Altmetric | [Metrics](#)

“Italy on 28 September 2003: the shutdown of power stations directly led to the failure of nodes in the Internet communication network, which in turn caused further breakdown of power stations<sup>2</sup>”

## Climate risks, networks and interdependencies: it's time to act

- Climate perspectives for France (Météo France and IPCC)

- Regarding the average annual temperature, in the case of the RCP4.5 scenario, it is expected to increase by 2.1 °C by 2100 (compared to the period 1976-2005) in France, with a decreasing gradient from the South-East to the North-West and more marked warming in summer and in the mountains;
- Heat waves will intensify and lengthen under all scenarios: their duration could double in the most optimistic scenario, and increase tenfold in the most pessimistic;
- in terms of precipitation, the uncertainties are more marked but they are slightly higher (less than a 10% increase), regardless of the emission scenario adopted. However, precipitation will increase by more than 10% in winter, and decrease in summer.

# Impact of risks on individual networks

Table 2 – Network infrastructure risk qualification test

		NETWOR K	Electricity transmission	Electricity distribution	Rail transport	Road transport	Fixed telecommunications	Mobile telecommunications
<b>CLIMATE RELATED HAZARDS</b>								
<b>Trends</b>	Increase in average temperature	■	■	■	■	■	■	■
	Heat waves, fires and drought	■	■	■	■	■	■	■
<b>Extremes</b>	Flooding, submersion, high water and landslides	■	■	■	■	■	■	■
	High winds and storms	■	■	■	■	■	■	■

# Lights Out: Climate Change Risk to Internet Infrastructure

Ramakrishnan Durairajan<sup>†</sup>, Carol Barford<sup>+</sup>, Paul Barford<sup>+</sup>  
<sup>†</sup>University of Oregon, <sup>+</sup>University of Wisconsin - Madison

- Impact of sea level rise on ICT infrastructure
- **No extreme event**

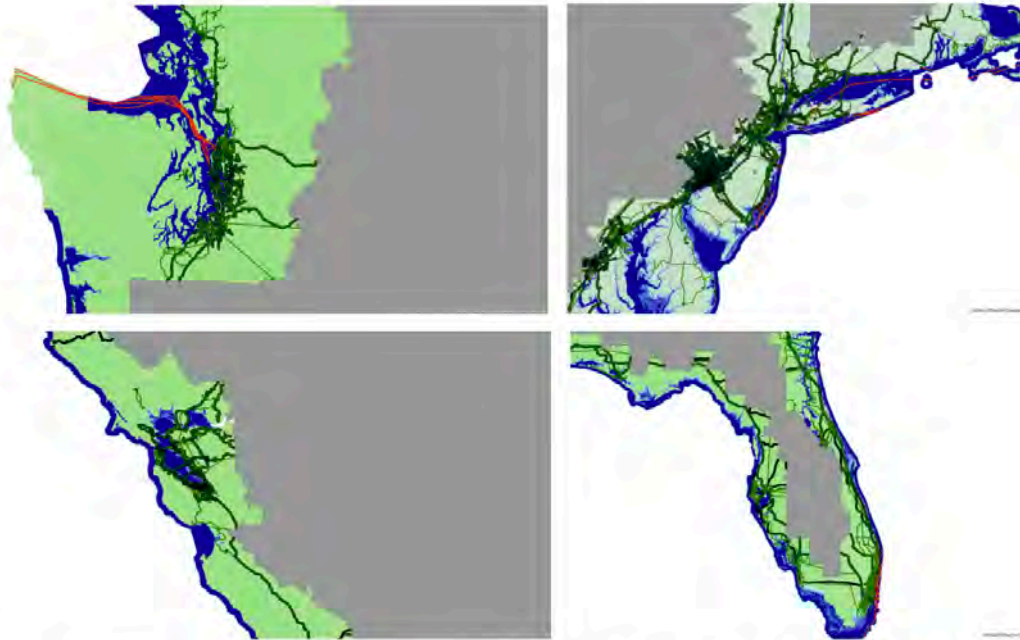


Figure 1: Overlap of Internet infrastructure based on 1 ft average sea level rise in North-Western US (top-left), North-Eastern US (top-right), Los Angeles (bottom-left) and Florida (bottom-right). SLRI is shown in blue (in green background). Submarine landing stations, POPs, Data centers and IXPs are depicted in red, green, black and yellow dots respectively. Submarine, metro and long-haul fiber-optic cables/conduits are shown in red, green and black lines respectively. Infrastructure in the SLRI-unaffected areas is greyed out.

Table 1: Timeline of projected Global Mean Sea Level Rise. Data is based off of “Highest” (i.e., most extreme) projections.

Year	2030	2045	2060	2075	2090	2100
Projected rise (ft)	1	2	3	4	5	6

## Residential Links Under the Weather

*SIGCOMM '19, August 19–23, 2019, Beijing, China*

Ramakrishna Padmanabhan<sup>1,2,3</sup> Aaron Schulman<sup>2</sup> Dave Levin<sup>3</sup> Neil Spring<sup>3</sup>  
<sup>1</sup>CAIDA <sup>2</sup>UC San Diego <sup>3</sup>University of Maryland

- We perform a large-scale study looking at eight years [...] in the US
- Focus on last-mile Internet
- Some findings :
  - Most weather conditions are accompanied by a statistically significant increase in the probability of failure; surprisingly, **this even includes routine weather events such as light rain and snow.**
  - Wireless link types (WISPs and **satellite**) experience orders of magnitude greater increases in failure rates than their wired counterparts (cable, DSL, fiber) during rainy conditions

# The project

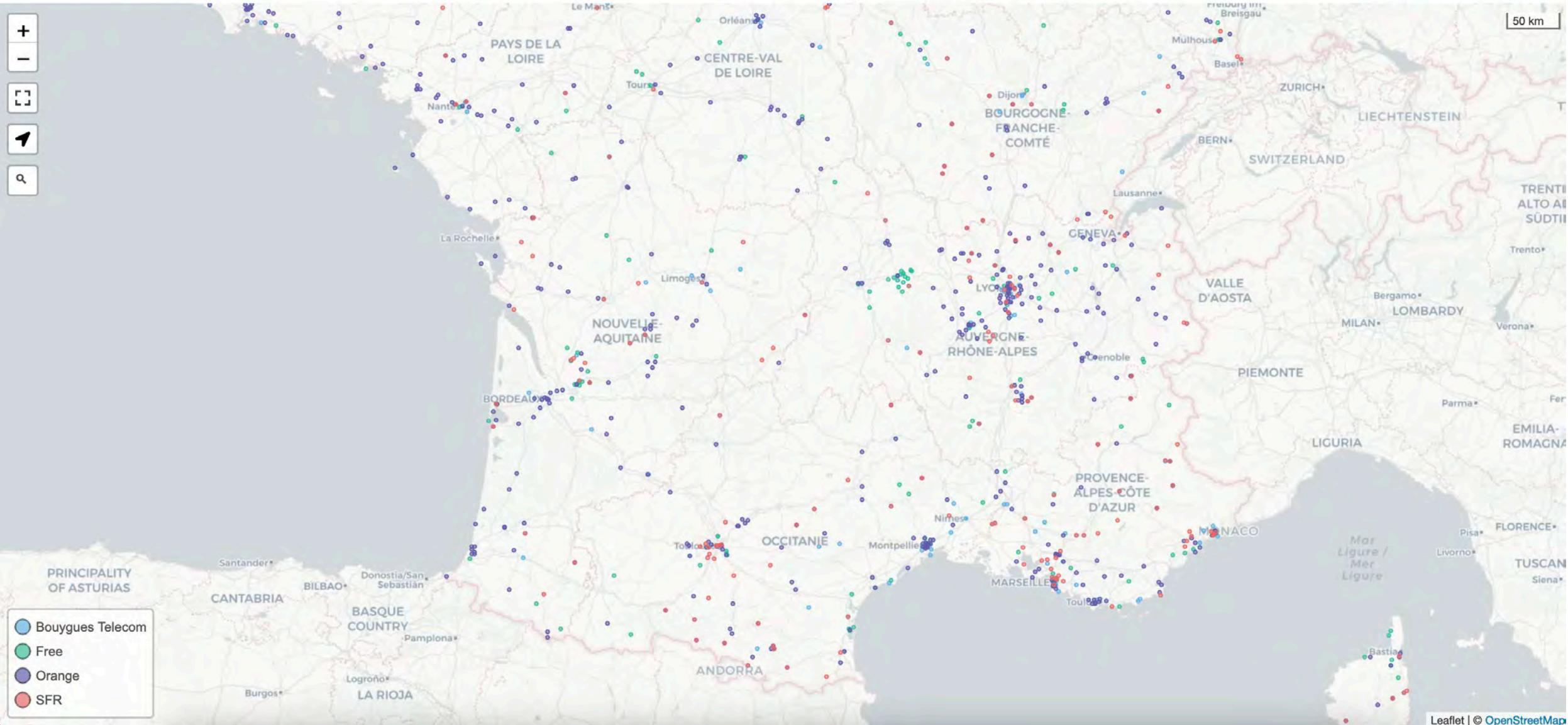
- Take some open data :
  - ISPs must report incidents and data is public
  - Open data from Meteo France
- ...and mine
- Ex :
  - Compare the quality of fixed lines and mobile lines

En savoir plus

Choisissez une date: 2024-09-12



J'alerte l'Arcep !





meteo.data.gouv.fr

💡 [Donnez votre avis](#)

 🔍

[Données](#)

[Recherche guidée](#)

[Hackathon le 8 et 9 avril 🚀](#)

[A propos](#)

# La météo et le climat en Open Data

*meteo.data.gouv.fr vise à référencer, héberger et diffuser les données publiques météorologiques produites par Météo-France. Vous y trouverez des données téléchargeables et utilisables de manière libre et gratuite.*



ou

[Recherche guidée](#)

THÉMATIQUES



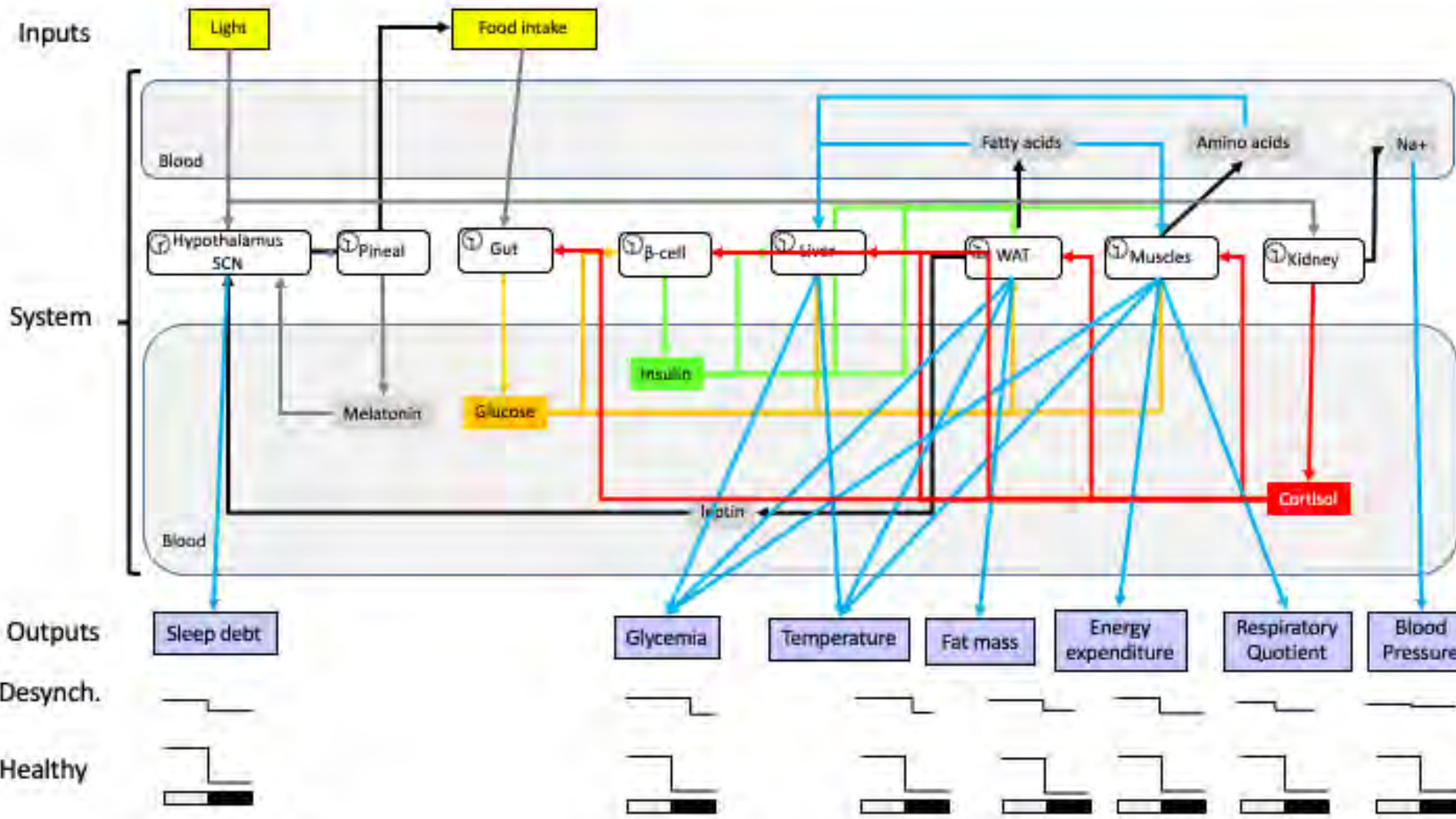
# Computational approach to synchronize circadian clocks

## Approche de modélisation hétérogène pour la synchronisation d'orloges circadiennes

Nadia Abchiche-Mimouni, I3S  
Franck Delaunay, iBv  
Jean-Paul Comet, I3S  
Gilles Bernots, I3S

[nadia.abchiche@univ-cotedazur.fr](mailto:nadia.abchiche@univ-cotedazur.fr)

# Le problème : Défi applicatif en chronobiologie



- ✓ Désynchronisation de la coordination circadienne
- ✓ Modélisation au niveau de l'organisme entier

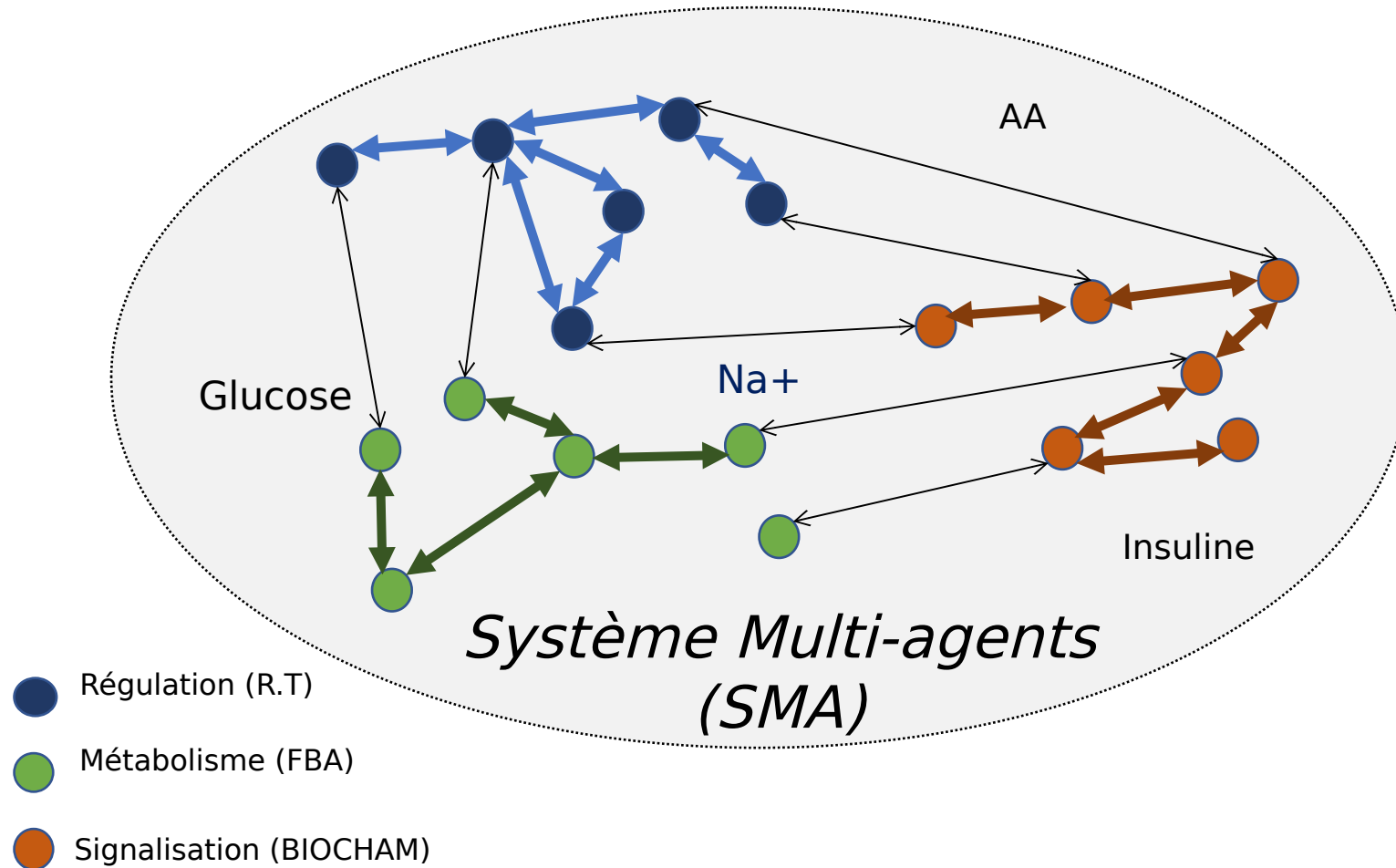


*Combiner trois niveaux de modélisation*



- **Horloges circadiennes**
- **Métabolisme**
- **Homéostasie globale**

# Approche multi-agents multidimensionnelle



- Choix du formalisme le plus adapté
- 1 agent  $\Rightarrow$  1 formalisme
- Interactions entre agents  $\Rightarrow$  interactions entre les entités biologiques
- Homogénéité des architectures des agents utilisant le même formalisme
- Différents types d'interactions entre les agents

# Hétérogénéité des formalismes de modélisation (1/2)

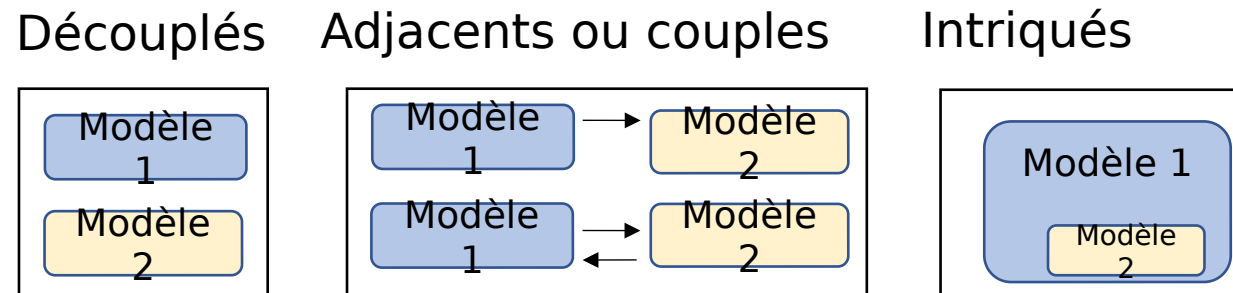
- Formalisme de René Thomas [8]
  - Performance
  - Recherche de paramètres automatisée (TotemBioNet, [1])
  - Plusieurs variantes de modèles d'horloges circadiennes
  - Possibilité de preuves par des méthodes formelles
    - **Régulation des horloges**
- Formalismes de type algébrique : Flux Balance Analysis (FBA, [3])
  - Matrice (relations) stœchiométriques (composants, réactions)
  - Contraintes
  - Fonction à optimiser
    - **Métabolisme**
- Formalismes à base de règles de réécriture (BIOCHAM, [2])
  - Représentation de réseaux de réactions
  - Règles de réécriture
  - Logique temporelle
    - **Signalisation**

□ **Choix du formalisme le plus adapté**

# Hétérogénéité des formalismes de modélisation (2/2)

- Spécificité des mécanismes de raisonnement
- Pas de formalisme global capable de les subsumer

## Approches hybrides ([4])



- Les interactions sont codées en dur
- Pas ou peu de réutilisation des modèles
- Ajout de nouveaux modèles coûteux

# Retombées potentielles

- Détection de la désynchronisation interne
- Prédiction des facteurs de désynchronisation
- Renforcement/réparation de la synchronisation circadienne en vue de la chronothérapie
- Chronothérapie effective pour optimiser l'heure d'administration des traitements
- Poursuite avec un projet de thèse de doctorat
- Pérennisation des recherches : réponse à appel à projets

## Environnement technique et compétences attendues ou à développer

- Plateforme multi-agent Jade (Java), <https://jade.tilab.com/>
- Moteur d'inférences : CLIPS, <https://www.clipsrules.net/>
- Connaissances en logique mathématique
- Programmation fonctionnelle
- Intelligence Artificielle distribuée

**MERCI !**



# Bibliographie

1. Gibart, L., Bernot, G., Collavizza, H. and Comet, J-P., *TotemBioNet Enrichment Methodology: Application to the Qualitative Regulatory Network of the Cell Metabolism*. In Proceedings of the 14th International Joint Conference on Biomedical Engineering Systems and Technologies (BIOSTEC 2021) - Volume 3: BIOINFORMATICS, pages 85-92, ISBN: 978-989-758-490-9 ISSN: 2184-4305
2. Dragana Jovanovska, François Fages, Sylvain Soliman. SBGN support in BIOCHAM. *Nature Precedings*, 2010.
3. Price, N. D., Reed, J. L., & Palsson, B. Ø. (2004). Genome-scale models of microbial cells: evaluating the consequences of constraints. *Nature Reviews Microbiology*, 2(11), 886-897.
4. Stéphanou and V. Volpert, Hybrid Modelling in Biology: a Classification Review, *Math. Model. Nat. Phenom.* Vol. 11, No. 1, 2016, pp. 37-48, <https://doi.org/10.1051/mmnp/201611103>
5. Ravi Allada, M.D., and Joseph Bass, M.D. Circadian Mechanisms in Medicine. *N Engl J Med* 2021;384:550-61. Dan L. Longo, M.D., Editor. DOI: 10.1056/NEJMra1802337

**PER Computer science, Artificial Intelligence.**

**Sparsification of Neural networks with structured sparse  $\ell_{1,\infty}$  projection for improving complexity and interpretability**

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**Michel Barlaud – [michel.barlaud@univ-cotedazur.fr](mailto:michel.barlaud@univ-cotedazur.fr)  
Jean-Charles Régis – [jean-charles.regis@univ-cotedazur.fr](mailto:jean-charles.regis@univ-cotedazur.fr)**

# Green AI; Energy consumption and interpretability

- It is known that the impressive performance of neural networks is achieved at the cost of a high-processing complexity and thus high energy consumption
- R. Schwartz, J. Dodge, N. A. Smith, and O. Etzioni, Advocate for “Green AI” Association for Computing Machinery New York 2019.
- Appes Microsoft, Google voit ses émissions de CO2 bondir de 48% en 5 ans a cause de l'IA de (Le Monde 2024).
- Sparsification of deep NN: M. Barlaud and F. Guyard, “Learning sparse deep neural networks using efficient structured projections on convex constraints for green AI,” ICPR, Milan, 2020.
- Application to the new JPEG AI compression standard: G. Cyprien, F. Guyard, M. Antonini, M. Barlaud, Learning sparse autoencoders for green AI image coding, Proceedings of the ICASSP 2023, Rhodes, Greece.

# Sparsification of Neural networks with structured sparse $\ell_{1,\infty}$ projection

- Method: Michel Barlaud, Guillaume Perez, and Jean-Paul Marmorat. "Linear time bi-level  $\ell_{1,\infty}$  projection ; application to feature selection and sparsification of auto-encoders neural networks". <http://arxiv.org/abs/2407.16293>, 2024.
- Select features and classification in Single cell Biological applications (With IPMC Sophia Antipolis)
- Predicting biological age using huge metabolomic data (with Aarhus University, Denmark)
- code is available at <https://github.com/MichelBarlaud/SAE-Supervised-Autoencoder-Omics>
- Internship 2024 of Nolwenn Peyratout August 2024

# This research project will focus on

- Computing the trade-off between sparsity (complexity) and accuracy (interpretability).
- Interpretability: Comparison With classical SHAP feature selection
- Multilabel classification and selection of relevant features.

The ideal candidate (Artificial Intelligence option required) will have skills in neural networks, master read, spoken and written English, and be adept at Python and PyTorch.

Contact: Professeur Michel Barlaud I3S Laboratory [barlaud@i3s.unice.fr](mailto:barlaud@i3s.unice.fr)

Professeur Jean Charles Regin I3S Laboratory: [jean-charles.regin@unice.fr](mailto:jean-charles.regin@unice.fr)

# Research Projects

## Milestones

When?	What?	Where?
December 16 <sup>th</sup> to 20 <sup>th</sup>	Immersion week	Host laboratory
January 10 <sup>th</sup> , 23h00	Final written report submission deadline	
January 15 <sup>th</sup> to 17 <sup>th</sup> 8h00-18h00	Final oral defense  Check your email to get your own defense date and time	Campus SophiaTech, Lucioles

**Any question?**  
**Contact [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr)**

# Q&A

with Research Projects supervisors

# 14h00-14h30

## DS4H HIC Creativity Projects

Take part in the development of a video game prototype





# DS4H - HIC Multidisciplinary Creativity Projects

Marc MARTI

DS4H Graduate school's Master students (in Computer Science, Electronics, Economy, Law, etc.) can join multidisciplinary teams alongside students from the HIC (Humanities and Creative Industries) master's degree program, Management, Jeu vidéo, Image, Créativité (MAJIC).



**FALL 2024**

**HIC  
Creativity  
Projects**

**Take part in the development of a video game!**



Video game prototypes will be presented at the Festival International des Jeux in Cannes.

**CANNES  
FESTIVAL  
INTERNATIONAL  
DES  
JEUX**

28 FEB > 2 MARCH

**Give** the group the benefit of your knowledge/skills in your discipline and **acquire** new ones, such as communication, cooperative and teamwork skills e.g. planning, management, leadership and peer support.

# DS4H - HIC Multidisciplinary Creativity Projects

Marc MARTI



Take part in the development of a video game

The logo for QBT, featuring the letters "QBT" in a bold, black, sans-serif font. To the left of the text is a stylized graphic of several curved, parallel lines that resemble a fan or a set of wings.

**QBT**



**LA BERGÈRE DE NUAGES**

The logo for Project Astra, featuring the words "PROJECT ASTRA" in a bold, white, sans-serif font with a cyan outline. The text is set against a dark purple background with a cyan and purple gradient. The logo is framed by cyan corner brackets.

**PROJECT ASTRA**

The logo for Synthopolis, featuring the word "SYNTHOPOLIS" in a bold, white, sans-serif font. The letters are set against a dark, textured background that looks like a wall or a concrete surface.

**SYNTHOPOLIS**

The logo for Secret, featuring the word "SECRET" in a bold, white, sans-serif font. The text is set against a dark blue background with a subtle, abstract pattern.

**SECRET**

# QBT

- Theme : **Gravity - Laboratory - Freedom**
- Genre : **Puzzle Game**
- Graphics : **3D - Duotone**
- Game mode : **Solo / Story mode**
- Platform : **PC**
- Target : **Mid-core Gamers - Puzzle game fans with atypical storytelling**
- Goal : **Free on Steam and at the FIJ - 10 minutes of gameplay**

**Contact:** [qbt.lab@gmail.com](mailto:qbt.lab@gmail.com)

# Pitch

STORY

A laboratory is experimenting on test subjects with extraordinary capabilities, yours : manipulating gravity. Overcome the test rooms hoping to get out of this place guided by the voice of a stranger, will you trust him?

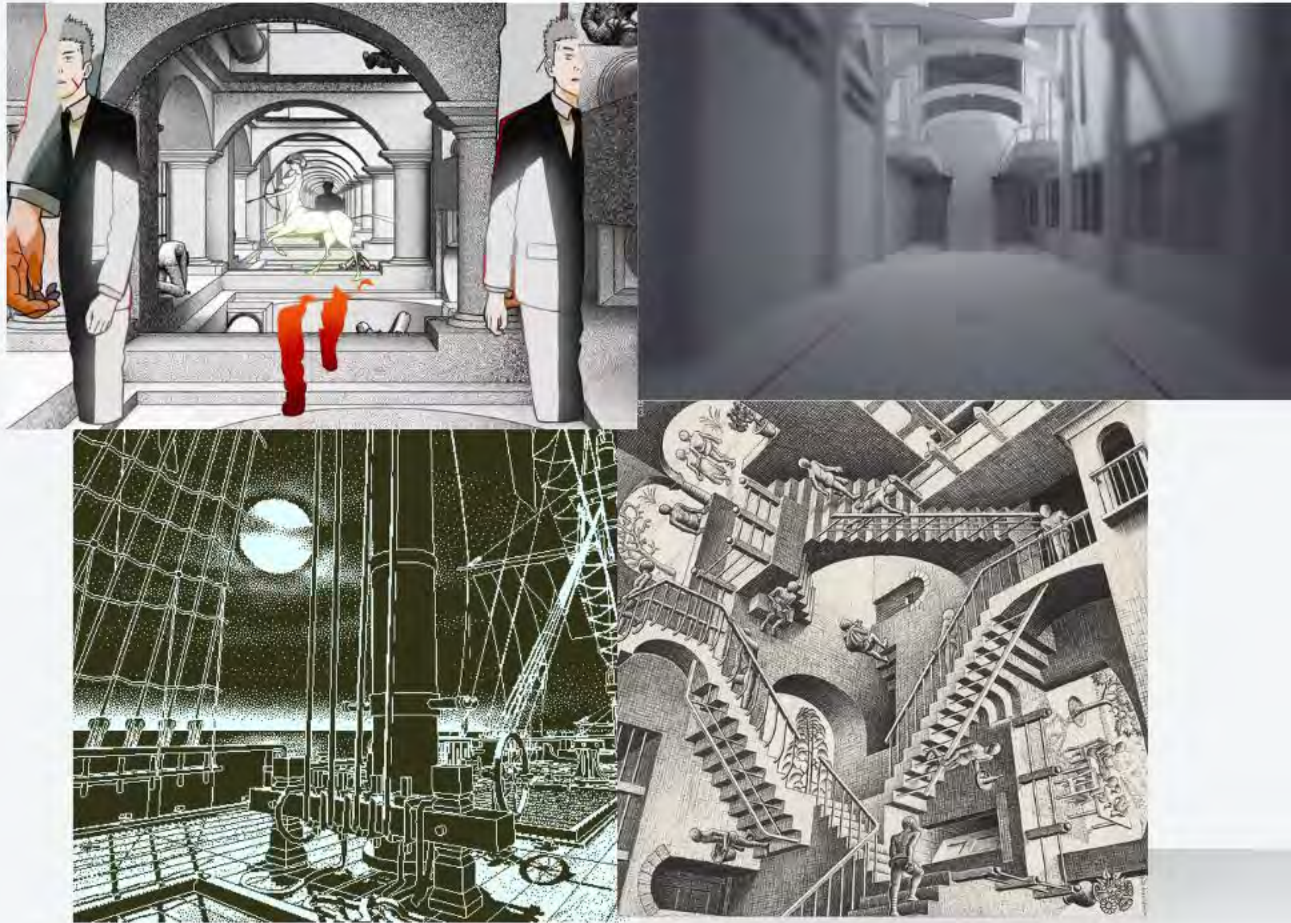
In this first-person puzzle game, play as a test subject who seeks to regain his freedom. Use gravity to turn your surroundings to your advantage and escape from this strange laboratory.

GAMEPLAY

**Contact:** [qbt.lab@gmail.com](mailto:qbt.lab@gmail.com)

# Game Art

A pressuring colorless lab created to experiment on the player.



A colorful and saturated outside world

**Contact:** [qbt.lab@gmail.com](mailto:qbt.lab@gmail.com)



# LA BERGÈRE DE NUAGES



Cloud Shepherdess



- **Platform** : PC
- **Game type** : 2D point'n'click
- **Game mode** : Solo, story
- **Genre** : puzzles
- **Game time**: 10 to 15 minutes



Key words : casual, narration, contemplation, puzzles, adventure

# Pitch

Through this short game of about **ten minutes**, discover the daily life of the **Cloud Shepherdess**, the protagonist of our story. Help her solve **puzzles** that will assist her in taking care of her cloud-sheep through funny animations that will surely bring a smile to your face.

Dive into a **contemplative adventure** and let yourself be guided by the magic of this dreamlike, **cartoonish** world !

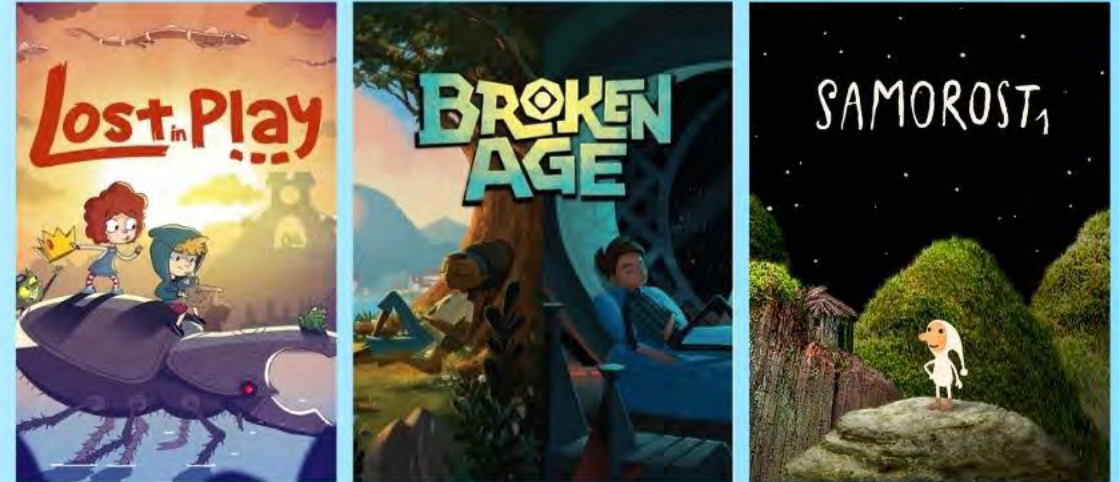


# Game art

Visual inspirations



Gameplay inspirations





# PROJECT ASTRA

## CHRONOS TERMINAL

THEME : VR - SCI FI - SPACE  
GENRE : ADVENTURE - EXPLORATION  
GRAPHICS : 3D - MODULAR SCI FI  
GAME MODE : SOLO/STORY MODE  
PLATFORM : PCVR & META QUEST 3  
TARGET : VR & SCI FI ENTHUSIASTS  
GOAL : 15 TO 20 MINUTES OF GAMEPLAY

CONTACT : [JESSYMONROCQ@OUTLOOK.FR](mailto:JESSYMONROCQ@OUTLOOK.FR)



# PITCH



VR - SCIFI - SPACE - EXPLORATION

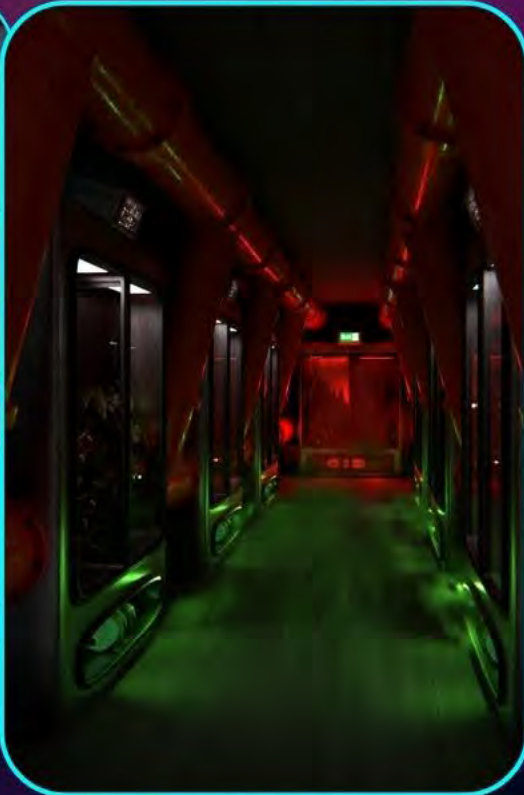
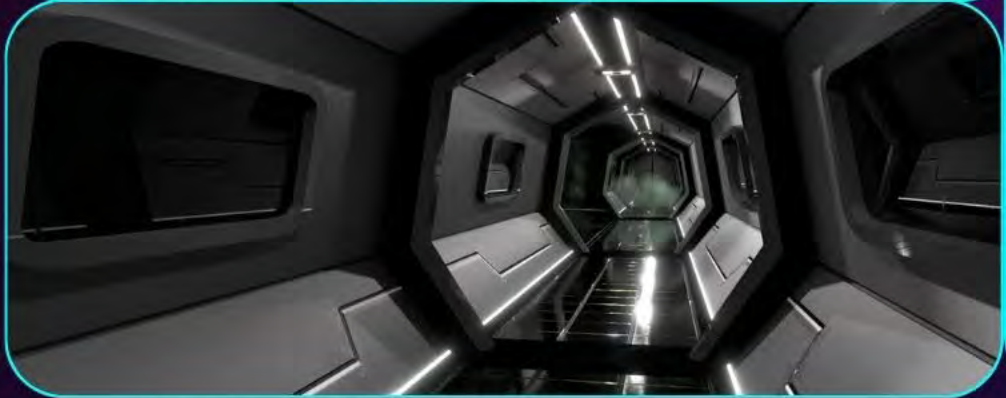
One **quest**. One **planet**. One **chance**.

In a dystopian futur where Earth is on the verge of destruction from pollution and catastrophes, join the engineer team of **A.S.T.R.A**, the interstellar world exploration alliance, and investigate on the misterious loss of communications with the **space station of Chronos**.

Immerse yourself within Project Astra, a **virtual reality experience** that will take you to the stars.

CONTACT : JESSYMONROCQ@OUTLOOK.FR

# CONCEPT ART & INSPIRATIONS



CONTACT : [JESSYMONROCQ@OUTLOOK.FR](mailto:JESSYMONROCQ@OUTLOOK.FR)

# SYNTHOPOLIS

- **THEME : PARKOUR - PURSUIT**
- **GENRE : 1VS1 - FPS - 3D**
- **GRAPHICS : 3D - BRUTALISM**
- **GAME MODE : MULTI PLAYERS**
- **PLATFORM : PC (WINDOWS)**
- **TARGET : COMPETITIVE GAME**
- **GOAL : 15 MINUTES OF GAMEPLAY**

**CONTACT : RAHALR506@GMAIL.COM**

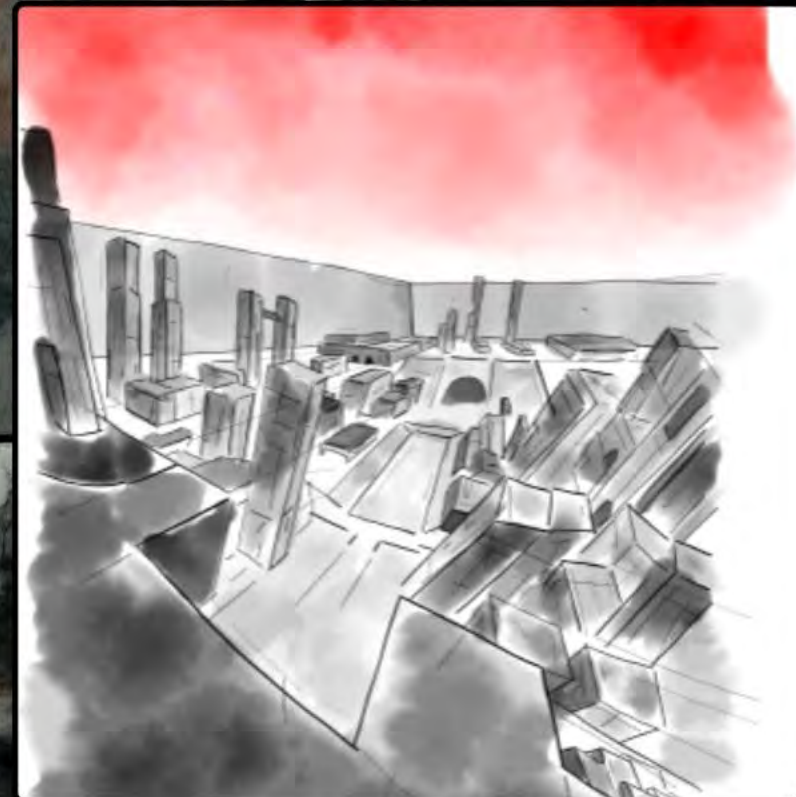
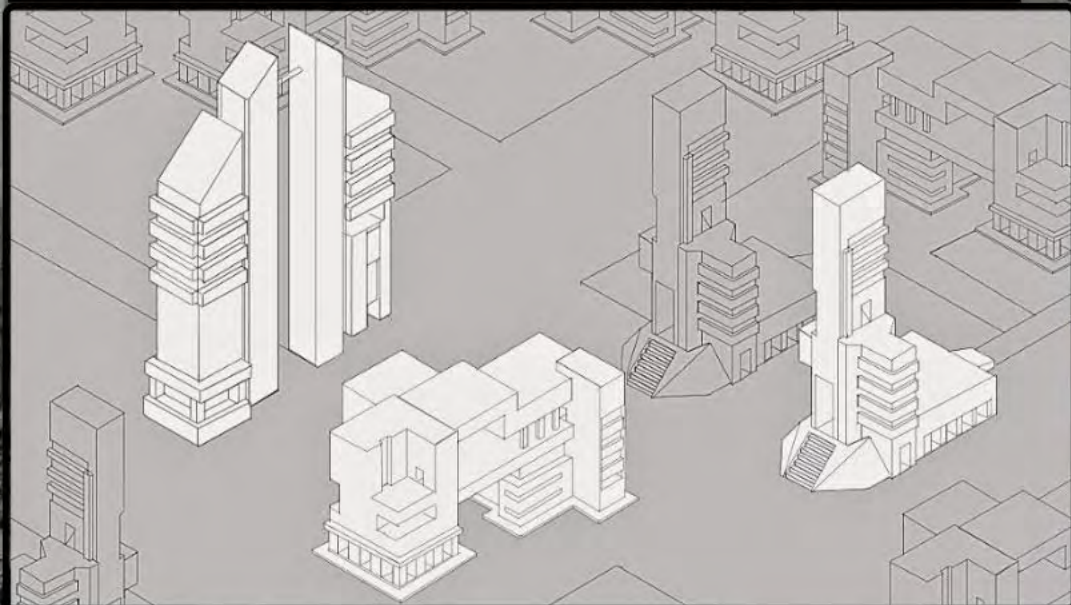
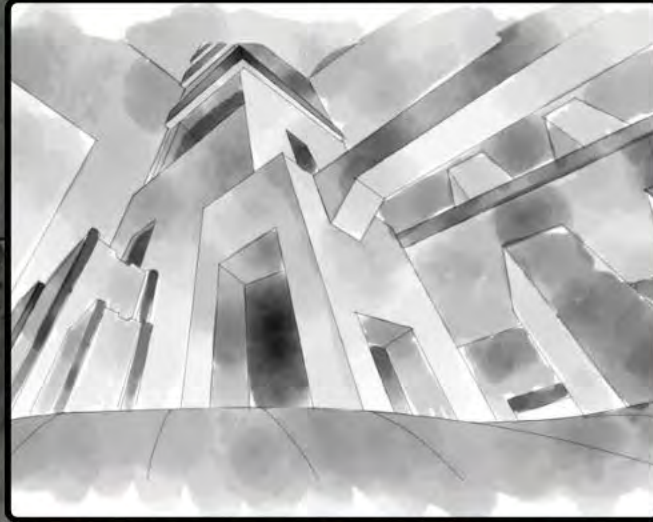
# PITCH

Two players are transported into the virtual world of **Synthopolis**: the **hunter** must explore the city with his **grappling** hook to find his opponent and retrieve the key before the time runs out. As for the **target**, they must flee at all costs from their pursuer while trying to find **time boosters** to win faster.

Take turns playing as one of the two characters and outsmart your opponent in this competitive game that combines speed and skill.

# CONCEPT ART & INSPIRATIONS

**BRUTALIST  
ARCHITECTURE OF  
BUILDINGS WITH  
WATERCOLOR TEXTURE.**



# SEACRET

- Adventure, narrative, side-scroller
- 3D, high poly, underwater environments
- Playable on **PC** with **keyboard & controller**
- 15 minutes of gameplay at most

Contact : [najadalmagne@gmail.com](mailto:najadalmagne@gmail.com)

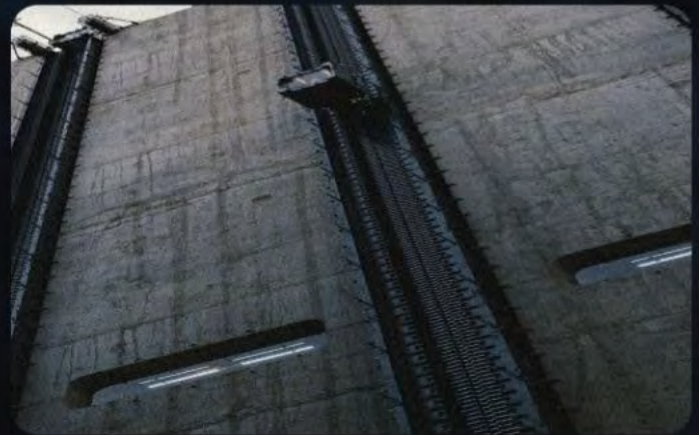
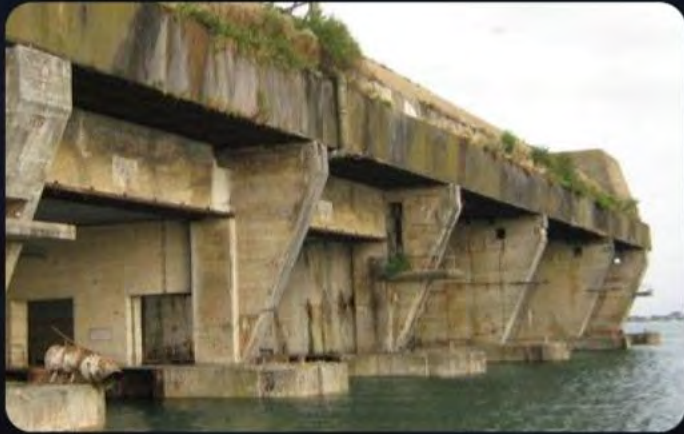
# PITCH

Seacret is a 2.5D side-scroller adventure game in which you take on the role of a diver exploring a shipwreck.

To unravel the mystery of this gloomy place, there's only one solution: solve riddles to unlock the secrets of these troubled waters, revealing a path far more surprising than it seems from the surface.



# MOODBOARD



# Where to find Fall 2024 HIC Multidisciplinary Creativity Projects

**MINORS**  
Tutorships  
PROJECTS

## WISHES

DS4H option wishes selection platform

<https://ds4h.univ-cotedazur.eu/wishes>

Or flash this QR code



## 2 - FIND OUT ABOUT FALL 2024 SEMESTER OPTIONS

DS4H Fall 2024 minors and projects selection will take place from September 12 to September 16 (23h00).

Do not miss the presentation meeting on September 12, 2024 from 12 to 3 pm. Find out more...

WHICH DS4H OPTIONS FOR WHICH STUDENTS?	MINORS / THEMATIC SCHOOLS	PROJECTS
	<p>What is a DS4H minor? What is a DS4H thematic school?</p>	<p>What is a DS4H project?</p>
YOU'RE A MASTER STUDENT	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Minors</li><li>• Thematic school</li></ul>	<p>Discover the research projects open in Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Tutorships</li><li>• Multidisciplinary Research Projects</li><li>• HIC Creativity Projects</li></ul>
YOU'RE A PhD CANDIDATE	<p>Discover the minors / thematic school open in the Fall 2024 semester:</p> <ul style="list-style-type: none"><li>• Minors</li><li>• Thematic school</li></ul>	<p>PhD candidates can take part in DS4H projects as supervisors:</p> <ul style="list-style-type: none"><li>• Submit a project and supervise a Master Student</li></ul>

# How to enrol in a HIC Multidisciplinary Creativity Project

**By Sept 16th**

>Enter your wish of project on [EREBE](#) or via your Master's coordinator

+

in the mean time  
>get in touch and meet the HIC team



qbt.lab@gmail.com



champinuf@gmail.com



jessymonrocq@outlook.fr



rahalr506@gmail.com



najadalmagne@gmail.com

**Before Sept 25th**

Has the HIC team accepted your application?

> Inform

[ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr)

# Q&A

with HIC Creativity Projects teams

# 14h30-15h00

## DS4H Registration Procedures

**Virginie Valot**

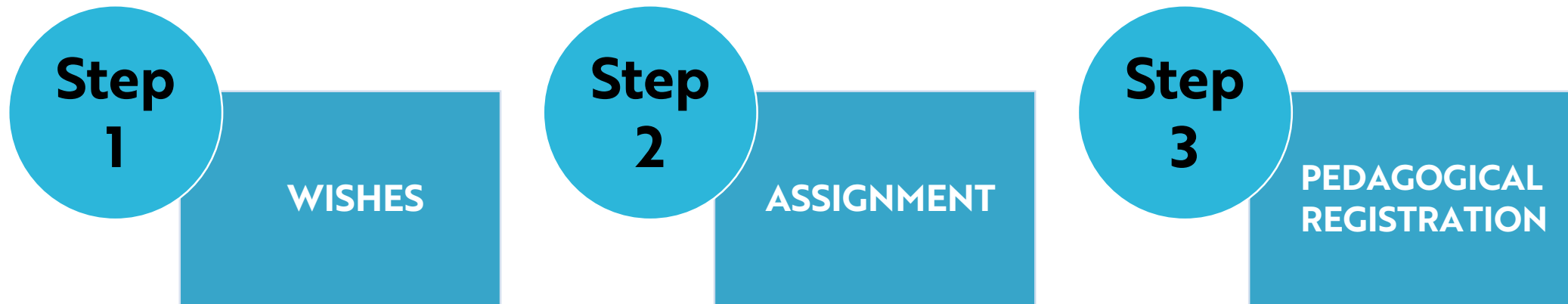
**Pedagogical Coordinator – EUR DS4H (multi-campus)**

**Office at the Sophiatech campus (Lucioles)**

[virginie.valot@univ-cotedazur.fr](mailto:virginie.valot@univ-cotedazur.fr)

**04 89 15 42 38**

# Registration for the multidisciplinary options offer: how does it work?



**3 MANDATORY STEPS!**

# Step 1: WISHES

ENTER YOUR WISHES ON TIME ON THE APPROPRIATE PLATFORM!

<https://ds4h.univ-cotedazur.fr/wishes>



**FROM SEPTEMBER 12 TO SEPTEMBER 16 (23h00)**

## MASTER STUDENTS

in M1 Informatique, M1 Informatique IA, M2 Informatique except EIT Digital, M2 MIAGE, M2 Electronique, M1 and M2 HIC MAJIC, M1 and M2 HIC MAPIC, M1 Psychologie ECTN, M2 SDL TAT, M1 LEA TRE, M1 Droit des affaires, ERASMUS Students

Enter your wishes on  
EREBE platform

## MASTER STUDENTS

in M2 Informatique EIT Digital, M1 Electronique, M1 and M2 Stratégie digitale, M2 DPINT

Get in touch with your curriculum coordinator

## DOCTORAL STUDENTS

Enter your wishes on  
ADUM platform

Go to section "Ecole Universitaire de Recherche DS4H - Systèmes Numériques pour l'Humain (disciplinaire ou académique)"

**Please note that you may not receive a confirmation email after your wishes selection. This will not impact the registration process.**

# Step 2: MINOR ASSIGNMENT

1. The pedagogical team selects and assigns you to your minor (first choice if possible).
2. **By the first week of October,** you receive an email in your university mailbox confirming which minor you are assigned to.
3. The minor coordinator get in touch with you for more details (schedule...).





# Step 2: PROJECT ASSIGNMENT

**In the mean time you entered your wish of project on [EREBE](#) :**

- **Individual Research Project in Tutorship (one day/week during a minimum of 8 weeks+one week immersion (16-20 Dec) with a minimum of 91h) :**
  - **Get in touch and meet the supervisor of the wished project.**
  - **Ask your Master's supervisor for approval.**
- **Creativity Multidisciplinary Projects - HIC:**
  - **Get in touch and meet the HIC Project team .**

**If your wish is [accepted](#):**

- 1. Inform « [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr) » before October 1st.**
- 2. Respect the deadline for sending documents requested by e-mail.**

**If your wish [isn't accepted](#):**

- **Inform « [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr) » as soon as possible so that we can try to redirect you to another available project.**

# Step 3: PEDAGOGICAL REGISTRATION



- Master's students are concerned (registration for training courses throughout the year for PhD students) → **Mandatory**
- Complementary to your :
  - "Inscription Administrative" (IA)/"Administrative Registration" (AR)
  - wishes on the EREBE platform
- Biannual
  - fall semester → after assignment, around first two weeks of October you will received a detailed email (on your email student account): respect the deadlines!
- corresponds to the **choice of options or specialization courses** :

Your EUR's disciplinary options + EUR DS4H multidisciplinary options

↳ DS4H minor/thematic school and projects (tutorship, group projects, etc.)

→ more details in the next slide

- online via your "Intranet étudiant"



**You will not be able to obtain your grades or validate your diploma without completed pedagogical registrations!**



# Step 3: PEDAGOGICAL REGISTRATION



- **Students from the SophiaTech and Valrose campuses:**

- EEA
- Computer Sciences
- MIAGE

→ **select precisely** which DS4H option you follow (name of minor/thematic school, type of project)

- **Other students from Saint Jean d'Angély, G.-Meliès, Carlone, Trotabas campuses:**

→ **Select "Choice of DS4H minor/Thematic school" or/and "Choice of DS4H project" only if a DS4H minor/thematic school or project is followed - according to the modalities communicated by your Campus Student Affairs department.**

- **I will then take care of selecting the specific minor/thematic school and/or project you are following.**



**You will not be able to obtain your grades or validate your diploma without completed pedagogical registrations!**



# Focus on: Individual Research Project in Tutorship

**No tutorship** can start and be conducted without an Agreement or with an incomplete Agreement (missing documents and/or signatures), otherwise you will be **ADJOURNED!**

## Any questions?

- [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr)
- Student Affairs assistance platform: <http://glpi-form-sco.univ-cotedazur.fr/>

## Mandatory Documents

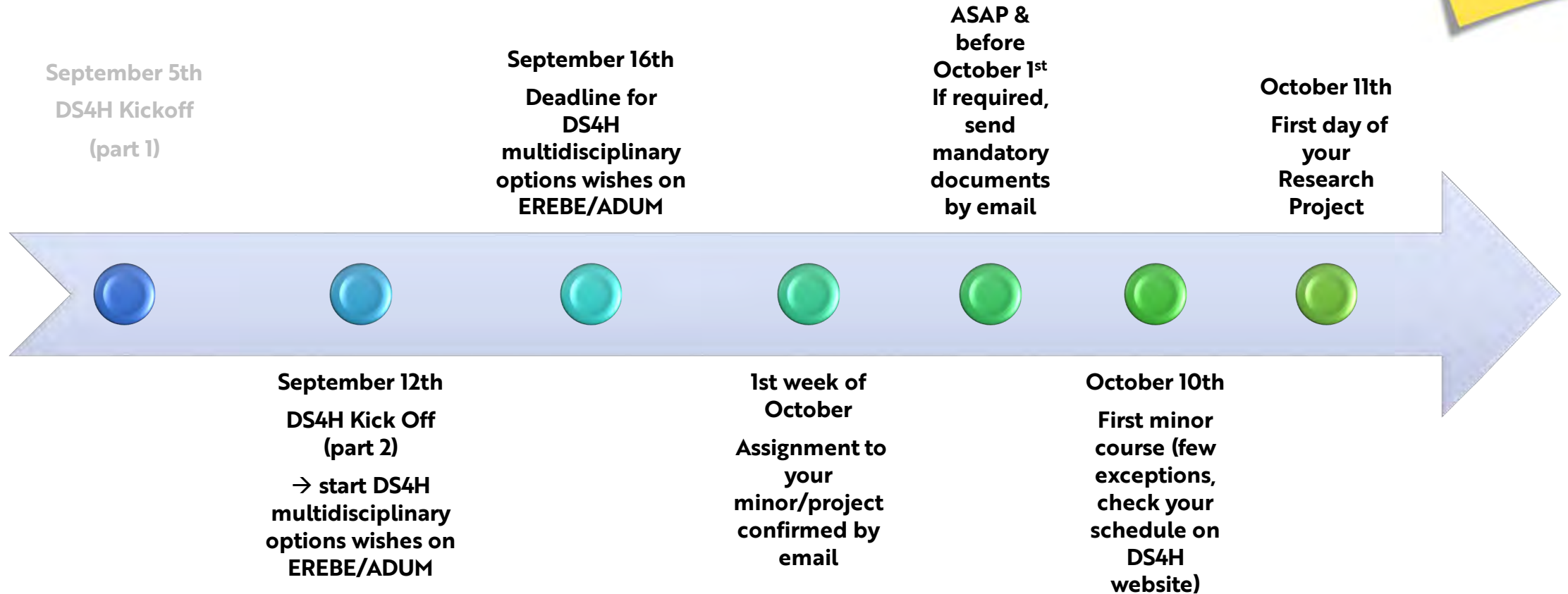
to be provided upon the validation of your project application  
and at the latest October 1st (Fall semester) or February 15th (Spring semester)

Send these documents to [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr)

Type of project	Documents to be provided
Tutorship	<ul style="list-style-type: none"><li>• Health insurance certificate (<i>attestation assurance maladie</i>)</li><li>• Civil liability insurance (<i>attestation responsabilité civile</i>)</li><li>• Student card</li><li>• Student ID card with updated sticker</li><li>• Precise address of the location(s) where the tutorship will take place</li><li>• Name of the service/team in the hosting laboratory</li><li>• Name of the tutor</li><li>• Subject number and title of the tutorship (as indicated on Erebe)</li></ul>
Tutorship and multidisciplinary project	<p><b>Semester schedule specifying:</b></p> <ul style="list-style-type: none"><li>• <b>The dates chosen to work on the project</b> over a period of at least 8 weeks (usually Friday or another day if agreed by student and supervisor).</li><li>• <b>The dates chosen for the project immersion week</b> (i.e. <b>5 full and consecutive days</b> to work on the project during which the supervisor will be available as much as possible to help the student).</li></ul> <p>This schedule must be validated by the project's tutor/supervisor and the student's training program coordinator.</p>

# Fall 2024

## DS4H Multidisciplinary Options Start



# NOW it's up to you

**ONE LINK:** <https://ds4h.univ-cotedazur.eu/wishes>

**before Sept. 16, 23h00**

## Master Students

- Choose your project (1 wish)
- Choose your minor/thematic school (3 wishes in order of preference)
- Wait for your assignments
- Make your pedagogical registrations

According to available places you'll be assigned to your first, second or third choice.

## Doctoral Students

- Choose your minor / thematic school on ADUM
- Contact the MED in case of selection problems

You will be assigned according to available places.

**CAUTION! minors' / thematic school' schedules must be compatible with your own major's schedule. And check the prerequisites! It's of your responsibility!**

# Vérifiez votre boîte mail quotidiennement ! Check your mailbox daily!



**Don't miss any emails from the University!**

<https://intranet-etu.univ-cotedazur.fr>

The screenshot shows the 'Intranet ETUDIANT' interface for the University of Côte d'Azur. The top navigation bar includes 'MES INFOS', 'MES OUTILS', 'MES ÉTUDES', 'MA VIE ÉTUDIANTE', and 'ACTUALITÉS'. The main content area is divided into two columns: 'Actualités' and 'Mes Outils'. The 'Actualités' section features three articles: 'Comment obtenir ma carte étudiant?', 'The Conversation : Répartition des médailles des JO 2024 et mondialisation du sport', and 'Passport Etudiant : le cours pour découvrir l'Université'. The 'Mes Outils' section contains icons for Moodle, Zoom, and UniAlumni. The 'Messagerie' icon is highlighted with a red circle. A search bar with '@ INTRANET' is visible in the top right corner. At the bottom, there are buttons for 'Toutes les actualités' and 'Tous les outils'.

**Deadline for application  
September 16<sup>th</sup>  
23h00  
1st come, 1st served!**

# Now it's up to you!

<https://ds4h.univ-cotedazur.eu/wishes>

Any question? We can help! [ds4h-pedagogie@univ-cotedazur.fr](mailto:ds4h-pedagogie@univ-cotedazur.fr)