

SOUND.AI Induction Week

Journey into AI - Research and Ethics

Under the umbrella of Sorbonne University (SU), The MSCA COFUND SOUND.AI Program aims to foster excellence in training, mobility and career development for doctoral students in one of the most dynamic AI communities in the world. From 2023, the SOUND.AI project will implement a highly selective programme open to 30 internationally recruited PhD students. It draws on the scientific and strategic policy of Sorbonne University and its partners to actively develop fundamental and applied projects in three key interdisciplinary areas: Changing societies, languages and cultures; A global approach to health; Resources for a sustainable planet.

All training sessions will be held at SCAI, Bâtiment Esclangon, Campus Jussieu.

Monday, January 15th: Program Introduction

NOTE: The morning session is reserved for doctoral students from the SOUND.AI program.

- 9h00: Welcome coffee
- 9h30: **Welcome session and program description** - AI at Sorbonne Université - Presentation of SCAI - **Alain Rabaute & Gérard Biau**
The program agenda will be outlined, the team will be introduced, and an open discussion regarding various deliverables, expectations, and available budgets will be held. A Q&A segment will follow, encouraging free discussion among all participants.
- 11h30: **A tour of the Sorbonne campus** to familiarize the students with the university environment **Nicolas Thimon** (meet @ Esclangon building, Jussieu floor, opposite the large fresco by Jacques Despierre).
- 12h30: **Lunch** for all doctoral students and supervisors.
- 14h00: **Life as a Researcher**, led by the **Doctoral College Team** and the project leader from SU and CNRS. This session aims to elucidate the overall progression of the doctorate and answer any practical queries from the students. We will also discuss housing, visas, and other logistics to ensure a smooth transition to life in Paris.
- 15h30: Break
- 16h00: **Foundations of modern NN**, **Erwan Scornet**
- 18h00: Wine and cheese @SCAI

Tuesday, January 16th: Foundations of Modern AI

- 9h30: **Foundations of Modern AI** session, led by SU and CNRS, in collaboration with UTC, **Baptiste Gregorutti and Yves Grandvalet**.
- 12h30: Lunch @SCAI
- 14h00: **AI applications for climate**, **Anastase Charantonis**

Wednesday, January 17th: AI, Ethics and Epistemology

- 9h00: **AI Ethics in Your Doctoral Project**, Anouk Barberousse, Mohamed Chetouani, Roger Guérin
- 9h00: **Conducting experimental research with human participants**, Mohamed Chetouani
- 10h30: Break
- 11h00: **Ethics within and without research**, Anouk Barberousse
- 13h00: Lunch @SCAI
- 14h00: **Scientific Integrity**, Roger Guérin
- 16h00: **Difference between ethics, regulation, norms, standards and deontology**, Jean Gabriel Ganascia
- 17h00: [Intelligence artificielle, intelligence humaine: la double énigme](#), followed by a cocktail reception for all participants, Daniel Andler, Amphi Herpin, Bâtiment Esclangon, Campus Pierre et Marie Curie, Sorbonne Université

Thursday, January 18th: Modern AI for resilient societies

- 9h30: **Digital Humanities**
- General Introduction to Digital Humanities, Glenn Roe
 - Hands-on Activity on Text Semantic Analysis, Motasem Alrahabi
- 12h30: Lunch @SCAI
- 14h00: Workshop on **Medicine and AI**, Xavier Tannier
Introduction to causal inference for medicine. Presentation of typical tasks with diverse and unique healthcare data to highlight the specific challenges of health data.

Friday, January 19th: Modern AI for resilient societies

- 9h30: **AI & Human Rights**, by Woman at the Table, Caitlin Kraft-Buchman (remote) and Sofia Kypraiou (on site)
- 13h00: Lunch @SCAI
- 14h00: **Audio signal processing and text to speech**, Yann Teytaut, Clément Le Moine
- 17h00: A short **visit to the Institute of Intelligent Systems and Robotics (ISIR)** and its robotics platforms. This will provide an insight into the practical applications of AI in a state-of-the-art environment