



WINTER SCHOOL DATA SCIENCE

« GENERATIVE AI »

26 FEBRUARY – 1 MARCH 2024

Centrale Casablanca
Teaching and Research Unit
« Applied Mathematics Computer and D@ta Sciences » UTER MID@S

Emines-UM6P
Data Science and Industrial Process
Chair - OCP S.A. Ecole Polytechnique - Mohammed VI Polytechnic University

Ecole Polytechnique
Centre de Mathématiques Appliquées
(CMPAX)

OBJECTIVE

Focus on Generative AI

Our winter data science school focuses on generative AI. Our main goals are to provide a deep understanding of generative AI techniques, foster collaboration and networking, promote practical skills through conferences, encourage innovation through a hackathon, present research projects, and recognize excellence through awards. We also aim to facilitate interdisciplinary learning by involving experts from various fields. Overall, our goal is to enable participants to expand their knowledge, interact with experts, and develop practical skills in the field of generative AI.

AUDIENCE

Designed for PhD, Master & engineering students, experienced engineers and researchers, in addition to entrepreneurs and innovators interested in Data Sciences.

CONTACTS

adil.ahidar@centrale-casablanca.ma
mohammed.elrhabi@centrale-casablanca.ma
eric.moulines@polytechnique.edu
marine.saux@polytechnique.edu
nicolas.cheimanoff@emines.um6p.ma
mehdi.abouelqassime@emines.um6p.ma



PLANNING

1 . Opening Session

Welcome address and introduction to the winter school • Overview of the objectives and program

2 . Keynote Presentations

- **Presentation by Eric Moulines: introduction to Generative AI**
- **Presentation by Eric Xing: Recent advancements in generative AI**
- **Presentation by Matthieu Cord: Practical applications of generative AI in multimodal sciences**
- **Presentation by Michalis Vazirgiannis: Combinatorial methods for graph analysis in generative AI**
- **Presentation by Hugo Touvron: Real-world examples showcasing the application of generative AI**

3 . Panel Discussions

- **Panel discussion on challenges and future directions in generative AI**
- **Panel discussion on the intersection of generative AI with business and marketing**
- **Panel discussion on leveraging generative AI for data-driven decision making in business**

4 . Research Posters Presentations

Selected Student or PhD student present their work on data sciences (not only in gen AI) in various domains

5 . Business Case Studies

- **Presentations by J. Barral and N. de Bellefonds showcasing successful applications of generative AI in business**
- **Insights into the impact, challenges, and opportunities of generative AI in business contexts**

6 . Hackathon Competition Showcase

- **Pitch presentation of the outcomes and results from the hackathon competition between EMINES and Ecole Centrale Casablanca**

7 . Awards and Closing Ceremony

- **Recognition and announcement of awards for outstanding contributions, including business-focused categories • Closing remarks and reflections on the winter school • Appreciation to participants, speakers, and organizers**