AI-DAYS@HES-SO 2025 – GENEVA & LAUSANNE – JANUARY 27- JANUARY 29, 2025 WORKSHOP DAY JANUARY 27

Session 2b: Al for Local Energy Systems

This workshop is organized in conjunction with the Smart Energy District flagship project. It aims to review the state of the art in academic and industrial AI technologies applied to energy. We are particularly interested in AI techniques applied to electrical energy consumed and produced at the scale of local energy communities. The new forms of decentralized electricity production and changing consumption habits are putting distribution networks under pressure. On the other hand, the liberalization of the electricity market is bringing new challenges to stakeholders: Distribution System Operator (DSO), energy provider/broker, local energy communities, end-users, etc.

In response to these challenges, new digital services will emerge in the near future. Examples of these services include flexibility trading, peak shaving and energy transactions trading. Other services will come on stream in the very near future. These services will essentially rely on AI and consumption/production forecasting.

The aim of this workshop is to present some of the latest research in the field of AI applied to Local Energy Systems.

Organization and structure:

The workshop will be divided into two parts:

- 1. Three presentations of academic and industrial projects: these presentations will review the state of the art related to AI technologies in the electrical energy sector, particularly in the Swiss context.
- 2. A round-table discussion: a discussion with the audience will identify potential new collaborations.

Schedule and planning: 15h30-17h30

	Topics	Speakers
15h30-15h45	Presentation 1	
15h45-16h00	Presentation 2	
16h00-16h15	Presentation 3	
16h15-16h30	break	
16h30-17h15	Round Table	
17h15-17h30	Conclusion	

Notes

The workshop has no specific registration, and walk-ins are welcome.

Speakers and committee

Last Name	First Name	Institution	e-mail address
Abdennadher	Nabil	HES-SO	nabil.abdennadher@hesge.ch
Roduit	Pierre	HES-SO	pierre.roduit@hecs.ch
Bosorg	Mokhtar	HES-SO	mokhtar.bozorg@heig-vd.ch
Bacher	Jean-Philippe	HES-SO	jean-philippe.bacher@hefr.ch











