Subject: Master thesis internship in the topic AI-Enhanced Monitoring for Photovoltaic Systems

Location: Lucerne University of Applied Sciences and Arts (HSLU), Switzerland in collaboration with Grenoble Electrical Engineering Lab (G2Elab)

Project Background:

We invite applications for a master thesis position that contributes to the STAR-SOLAR project. This project aims to promote residential photovoltaic (PV) adoption through a socio-technical approach. The master thesis will focus on preliminary research using existing data, with the goal of enhancing predictive maintenance and improving operational efficiency.

Research Scope:

This master thesis work will involve:
- Data Analysis: Conducting in-depth analysis of existing datasets related to PV performance.
- Algorithm Review: Reviewing machine learning and predictive maintenance algorithms applicable to PV systems.
- System Assessment: Evaluating monitoring systems that integrate IoT and AI for continuous performance monitoring and fault detection.

Candidate:

We are looking for candidates with:
- A background in electrical engineering, computer science, or renewable energy.
- Familiarity with machine learning and data analysis.
- Strong analytical skills and an interest in renewable energy applications.

Application Process:

To apply, please submit:
1. A cover letter describing your motivation and experience.
2. Your CV and academic transcripts.

Submission Contact:

Please send applications to: Yousra.sidqi@hslu.ch and benoit.delinchant@g2elab.grenoble-inp.fr