

Institut für Energiewirtschaft und Rationelle Energieanwendung (IER)

The advancing digitalization has led to an increased demand for energy efficient software applications. This research project aims to thoroughly examine the creation of energy models for software using Machine Learning (ML) techniques and compare them with traditional methods.

Foundations of Energy Modeling:

Overview of existing models and methods

Creation of Energy Models using Machine Learning:

- Analysis of the functionality of ML methods
- Implementation of ML models and validation through real measurements and benchmarks

Comparison with traditional methods:

Contrast of ML methods with traditional modeling techniques

Analysis of Features:

- Investigation of specific features considered crucial by ML models for energy modeling
- Comparison with conventional approaches to feature selection

Requirements:

Students with an interest in digitalization, software development, and Machine Learning are encouraged to apply. This project offers the opportunity to gain insights into the world of energy modeling and Machine Learning.

Start of the project: Immediate availability

Application: If you are interested in this project, please contact us with your current transcript, resume and the date you would like to start.

Contact:

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Research project/Bachelor thesis/Master thesis

"Investigation of Energy Modelling for Software Using Machine Learning Techniques"

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