

project meeting minutes

Date: 04-02-2026

Location: Stokes Builing, DCU.

Attendees: Dhanush Kumar Ramesh (Student), Dr. Marissa Condon(Supervisor)

1. Agenda

- Discuss the forward model approach
- Usage of Dataset and openEMS exploration
- Novel aspect majorly focusing on Inverse Model

2 Key Discussion Points

Topic A: Technical Approach

- Focus majorly on inverse model as the forward models are already established. Add Novel aspects and find ways to make the inverse model better
- Agreed upon the usage of tuhh si/pi database for training the model and also to use it with random variations. Also to explore the use of openEMS.
- Research and work on finding the methods and logic (that add novel aspect) to the inverse model.

Topic B: Future Directions

- Defining appropriate objective functions for the inverse model.
- Analyzing openEMS and to provide initial results as soon as results are generated (will be discussed in detail in next meeting)
- Exploration of novel aspects that could be added to the project.

3. Decisions Made

- To focus on Inverse model and find what methods can be used.
- Explore openEMS and analyze the data from SI/PI database from TUHH.

4. Action Items

Task	Deadline	Status
1. Analyze SI/PI Database to train the model	Immediate	In progress
2. Research on the machine learning methods that can be used for inverse model:	Ongoing	In Progress
3. Dataset Search: Lexplore SI/PI database	Ongoing	In Progress
4. Data Generation Alternatives: Analyse and explore openEMS	Ongoing	In Progress

Task	Deadline	Status
5. Python Feasibility: Explore implementing the Inverse Model in Python	Week 5	To Do
6. Inverse Model Exploration: Research objective functions (Long term)	Ongoing	To Do
7. Novelty: Brainstorm specific novel aspects to add to the project	Ongoing	To Do

Next Meeting

Date: 18-02-2026 (Date & Time may change)