

Deep Learning Course - Fall 2023

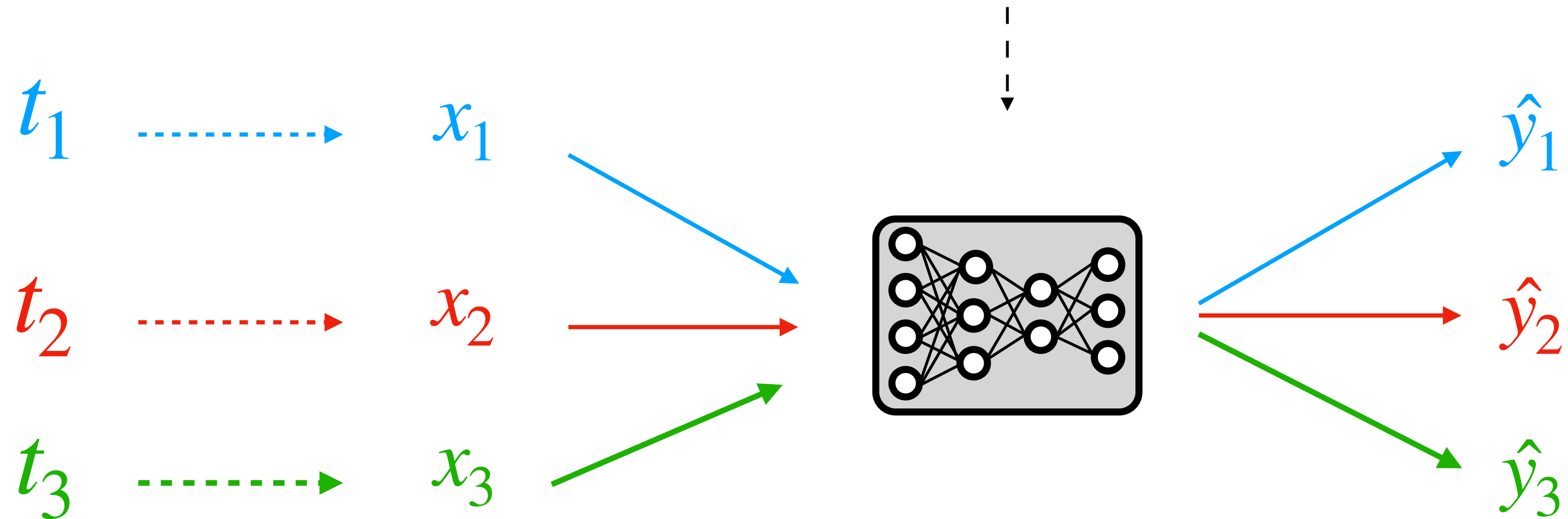
# Meta-Learning Lab

**Understanding the Main Objective and Technical Challenges**

# Multi-Task Learning

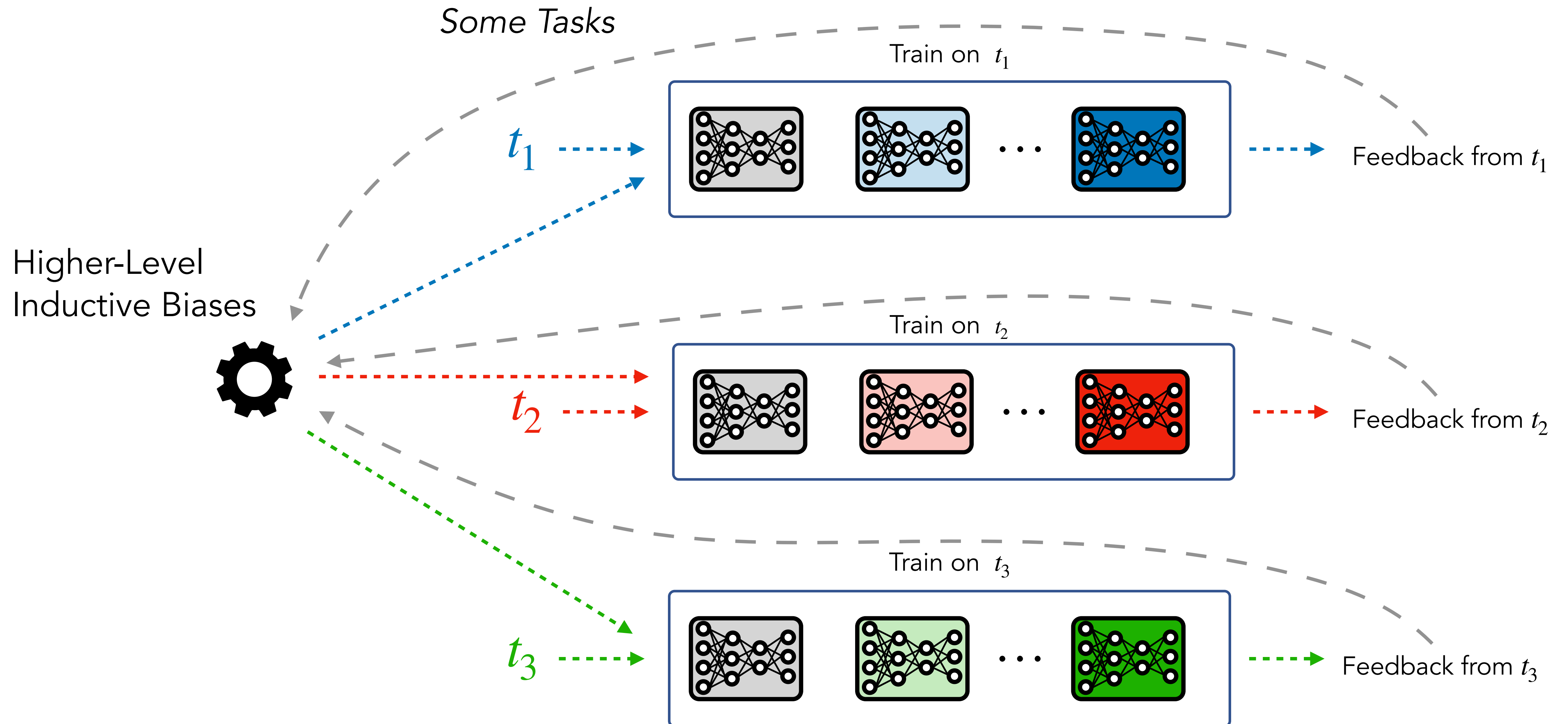
*Some Tasks*

*Same Model*

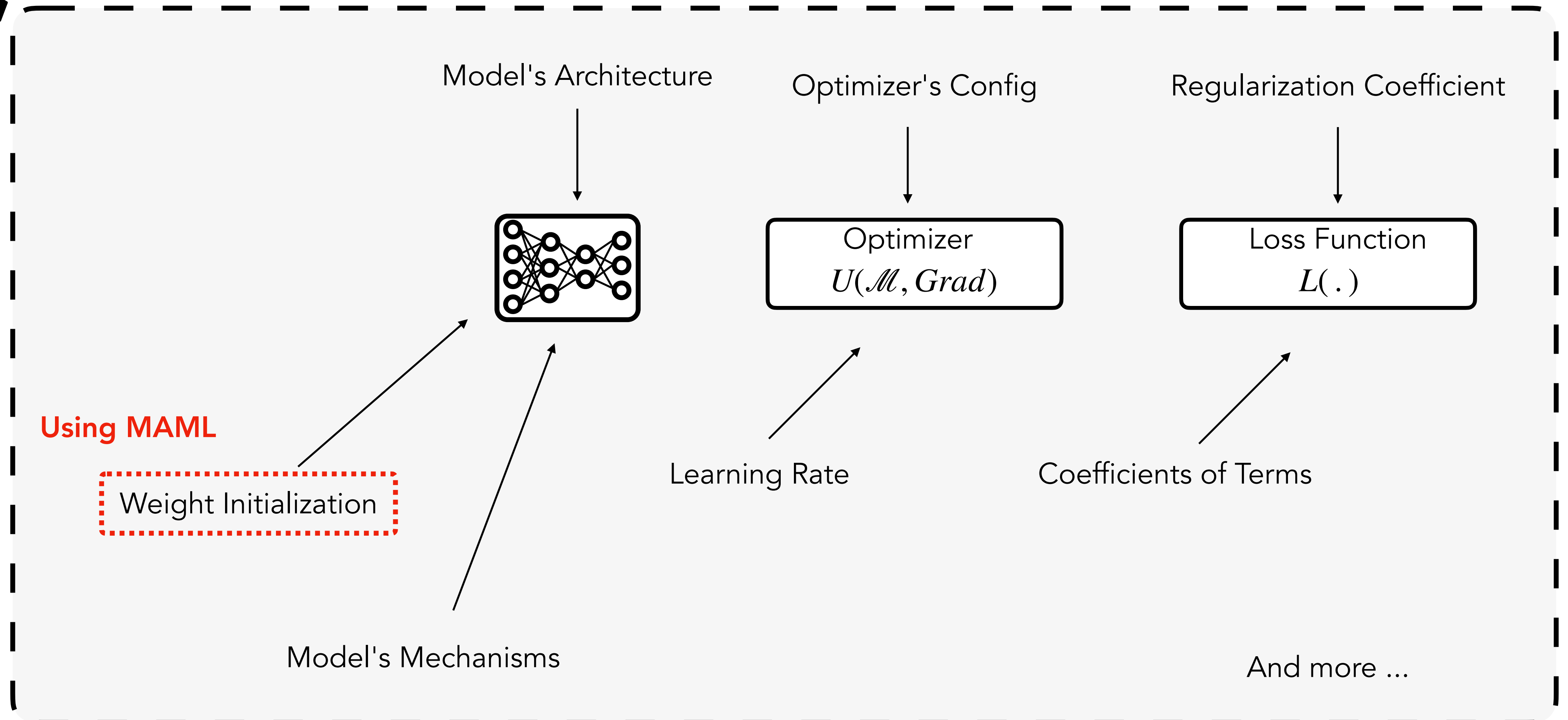
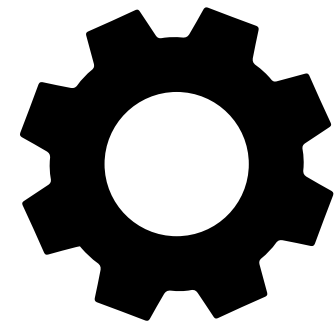


*Objective: learn all three tasks with shared modules*

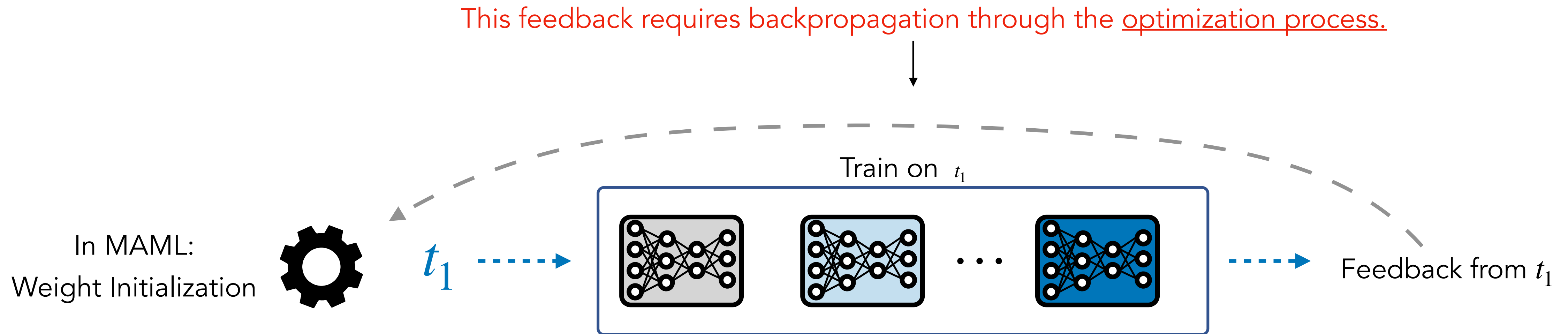
# Meta-Learning



# Higher Level Inductive Biases



# An Important Technical Challenge



But in PyTorch, after each update step in the training process, the "link" to the previous steps is cut.

One possible solution: **stateless** model execution.