

## Overview of AI and Machine Learning in Module 1

User: Can you give me an overview of Module 1. What topics will we explore?

Chatbot: Module 1 will cover the basics of data, models, and objective functions in the context of machine learning. We will discuss the importance of data, the choice of models, and the optimization process. Topics include data types, data cleaning and preprocessing, model selection, robustness, and understanding AI-based models. Additionally, we will explore the concept of adversarial attacks and the need for robustness in AI models. The module will also delve into the practical aspects of training, validating, and testing models, as well as the importance of understanding and interpreting model predictions. Overall, Module 1 will provide a solid foundation for understanding the key components of AI and machine learning.