

Tutorial 1: What is Machine Learning?

In this tutorial, we will discuss your impression of machine learning and what you will learn in this course. Spend the first 20 minutes discussing the following questions and come up with collective answers within your group. We will spend the rest of the 20 minutes sharing answers among groups.

Question 0. Hello!

[5 minutes]

- Take the HDMI cable and project the following form on the screen.

<https://forms.office.com/e/ukNXzTYYzp>

- Introduce yourself and put your name in the form.

Question 1. Thinking about machine learning systems.

[5 minutes]

- Name one tool, software, or website that might involve machine learning.
- What ingredients do you think are involved in developing the system?
- Based on the ingredients, piece together the development process of the system.
- How do we ensure correctness of a piece of software? How do we ensure correctness of a machine learning system?

Question 2. Name as many *concepts* in machine learning that any one of you in the group already know something about.

[5 minutes]

Question 3. Identifying pasta.

[5 minutes]

- Do you see pasta?



- Suppose you want to write a program to replicate how you identify pasta in an image. Describe your thought process of how you identify pasta.
- How long does it take you to recognize there is pasta once you see an image?
- How long does it take you to describe how to recognize pasta?

Question 4. Towards a definition of machine learning.

[5 minutes]

- Based on Question 2, what is machine learning?
- Have a look at the calendar page of the course and compare the concepts you listed in Question 2.

<https://homepages.inf.ed.ac.uk/htang2/mlg2024/calendar.html>

- What would you like us to focus on or cover in this course?