

7 Ethics and Ownership – Part 2 — Answers

Answers

7.1 Understanding input: speech recognition or image recognition. Producing output: machine translation, recommendations, or driving a car. (One of each.)

7.2 Machine learning lets a system learn patterns from lots of example data and improve at a task, instead of a programmer writing every rule by hand.

7.3 Optical character recognition (find the words) → machine translation → text-to-speech.

7.4 Bias is when the AI makes unfair decisions for some groups; it comes from training data that is unbalanced or already unfair.

7.5 Benefit: e.g. accessibility, productivity, pattern-spotting. Concern: e.g. bias, job loss, privacy, accountability. (One of each.)

7.6 If no one can see *why* the AI decided something, a wrong or unfair decision is hard to spot, challenge or correct — and it is unclear who is responsible for it.

7.7 Benefit: the chatbot is cheaper and available 24/7. Risk: customers with unusual problems may get unhelpful answers, or feel no human is accountable. (Any sensible one of each.)