Embedded Systems and CS Education

1. What is the difference between a microcontroller and a microprocessor?

A microprocessor has only one component to it – a central processing unit (CPU) while a microcontroller has a CPU, Memory, and Input/Output. (guru99.com)

2. What are real-time systems?

They are what they sound like! They take input and simultaneously work to produce an output in real time – without any delays or thinking time. They do this by processing data the tenth -of-a-second it comes in.

3. What is a control system?

It is a system that acts as the brain for other devices by managing and controlling the actions of these other devices using what are called "control loops"

4. What are intelligent tutoring systems?

They are intelligent systems that allow for students to master specific skills by shaping algorithms according to the students personal level – it is highly (and quite specifically) customized.

Some useful links:

https://www.igi-global.com/dictionary/intelligent-tutoring-system-its/15052
https://www.electrical4u.com/control-system-closed-loop-open-loop-control-system/
https://www.geeksforgeeks.org/real-time-systems/