

GCSE Bitesize Computer Science

Francesca Rosella on algorithms in wearable technology

I'm Francesca Rosella and I'm chief creative director and co-founder of CuteCircuit. CuteCircuit is a wearable technology company - we're a fashion brand that designs amazing garments embedded with technology.

Understanding algorithms brings about many interesting possibilities. For example, you think about an algorithm as something that is very dry and very scientific, but if you think in terms of what the algorithm allows you to do, then you see that there are infinite possibilities that are extremely creative. We use many algorithms in our products, and we use them mostly to create step-by-step procedures that can have magical results.

In our garments at CuteCircuit, for example, we use algorithms to respond to what is happening in the environment. Imagine that there is a garment that can light up or switch off depending on the time of the day. In this case, we will use an algorithm that is gathering data from a sensor, for example a light sensor. So we know that when there is light outside, the algorithm is going to switch off the garment, and when there is dark outside, the algorithm is going to turn on the garment. And all this algorithmic work happens in a very subtle manner, step by step, but the user that is wearing the garment is not going to know what is happening, but they are going to see the result and the result is going to be magical.