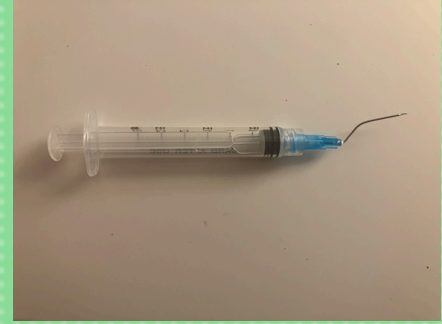




Background Info



Step 1

Automated production of goods has become much more common with recent advancements in technology

Step 2

Computer error, however, can prevent automated manufacturing from being completely human-independent. Machines can incorrectly fabricate components due to poor materials or equipment failure, for example.

Step 3

Currently, humans are commonly tasked with detecting defects in freshly made products. However, laborers can experience fatigue while scanning objects, and they can be costly to hire

Step 4

In the medical industry, products should be scanned for defects before they are shipped out to hospitals. An important example of this is syringes. However, 1 out of every 200 syringes are defected, which is a lot when thinking about a large scale.

Step 5

A Convolutional Neural Network can be used instead, which is inexpensive to implement and is highly precise in finding defects

