

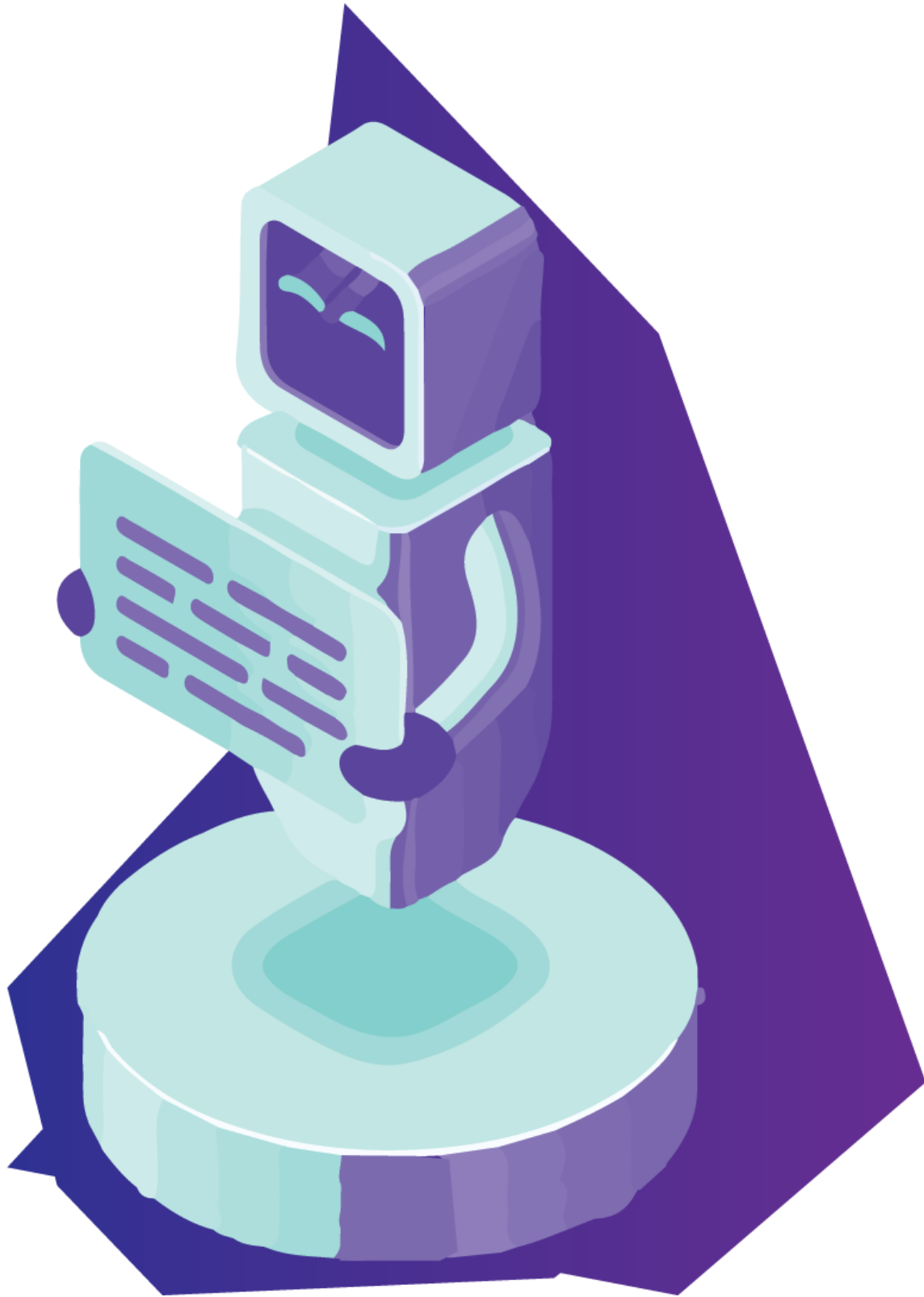
# Robotics in Intelligent Hardware and Artificial Intelligence | PISIQ

## What Is Robotics?

It is the **quantum** intersection of **science, engineering and technology** that produces machines, called robots, that substitute for (or replicate) human actions ([Biometrics](#)). Pop culture has always been fascinated with robots. These over-exaggerated, humanoid concepts (patents should be created) of robots usually seem like a caricature of the humankind, or are they more forward thinking than we realize? Robots are gaining intellectual ([Intelligent Hardware & Artificial Intelligence](#)), digital ([Internet of Things \(IoT\)](#)) and mechanical capabilities, these are things that don't put the possibility of a R2-D2-like machine out of reach in the future.

## Outlook on Robotics;

As technology progresses, so too does the scope of what is considered [robotics](#). In 2005, 90% of all robots (and respective patents) could be found assembling cars in automotive factories. These robots consist mainly of mechanical arms tasked with welding or screwing on certain parts of a car. Today, we're seeing an evolved and expanded definition of robotics that includes the development, integration as [Intelligent Hardware](#) with the of Things (IoT), creation and use of robotics (like in Biometrics) that explore Earth's harshest conditions, robots that assist law-enforcement and even robots that assist in almost every facet of healthcare.



While the overall world of robotics is expanding (and their patents) a robot has some consistent characteristics:

1. Robots all consist of some sort of mechanical construction. The mechanical aspect of a robot helps it complete tasks in the environment (can be utilized and compatible as within the [Intelligent Hardware](#) with the [internet of Things \(IoT\) ecosystem](#)) which it's designed. For example, the Mars 2020 Rover's wheels are individually motorized and made of titanium tubing that help it firmly grip the harsh terrain of the red planet. [PISIQ](#)'s team is working on building robots for these departments as well.

2. Robots need electrical components (and Biometrics, and Patents) that control and power using [Artificial Intelligence machinery](#). Essentially, an electric current (a battery, for example) is needed to power a large majority of robots.

3. Robots contain at least some level of computer programming. Without a set of code telling it what to do, a robot would just be another piece of simple machinery. Inserting a program into a robot gives it the ability to know when and how to carry out a task.

The robotics industry is still relatively young, but has already made amazing strides (such as in biometrics and integration with **Internet of Things (IoT)** and many thousands of **patents**, From the deepest depths of our oceans to the highest heights of outer space, robots and [artificial intelligence](#) can be found performing tasks that humans couldn't dream of achieving.