# **XELA** ROBOTICS

XELA Robotics offers industry-disrupting technology with our tactile sensors, creating new possibilities in assembly, logistics, agriculture, and many other fields.

We believe that there is a missing piece in the design of current robots. Most companies focus on visual data and smart AI, which are very important to locate an object. However, visual data is not enough to grasp, hold, and manipulate an object. Tactile data is required to solve this problem.

Only the sense of touch can tell you if you are: grasping the object with the right amount of force, if the object is slipping out of your hand, and so forth.



Hardware and Software Company

INTO

**Tactile Sensing Technology** 

ESTABLISHED TO

Provide the Human Sense of Touch to Robots



Hardware Development Tactile Sensors



Integration Service Sensor Integration



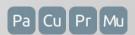
Software Development UAI Software

## HARWARE DEVELOPMENT

Our company developed uSkin, a high-density 3-axis tactile sensor in a thin, soft, durable package, with minimal wiring. uSkin can be easily integrated into both new and existing robots.

This provides robots with a human-like sense of touch, which gives them the ability to grasp and manipulate objects with precision.

For more detailed information about our tactile sensors, please visit our website at: https://xelarobotics.com/en/uskin-sensor







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## **INTEGRATION** SERVICE

The XELA uSkin can be easily integrated into both new and existing robots. These are some of the robot hands and grippers that we have recently equipped with uSkin Sensors.

For more detailed information, please visit our website at: https://xelarobotics.com/en/integrations

#### **Recent Integrations**



WSG 50 & EGI Integration 24 taxels per module

2 sensor modules 48 taxels in total



F2-140 & 85 Integration



48 taxels in total

2 sensor modules

24 taxels per module

Allegro Hand Integration

Each finger includes 78 taxels The palm includes 72 sensors

368 tri-axial tactile sensors in total

## **SOFTWARE** DEVELOPMENT

XELA Robotics is currently rolling out its features for the upcoming uSkin Ai (UAi) Software and the UAi App.

Our software solution and App will host many features to improve the overall uSkin experience and benefit our users.

Below an overview of all the active and upcoming UAi Software features. For a more detailed description, please review the Product Catalog.

#### **Basic Functions**

- Data Recording
- Tactile Data Visualisation Point of Contact
- Postprocessing
- Enhanced Data Collection
- Magnetic Interference

#### **Object Grasping**

For Robotic Integration

- Grasp Success Recognition Suggestion for Grasp
- Self Learning

### Recognise Objects

**Object Information** 

Detect Internal Properties

Detect Weight

Detect Adhesion Detect Shape Object Orientation

About Us

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