

SALVADOR GIRÓ

CEO INFAIMON Group





InPicker, solució BinPicking per Visió Artificial 3D

III FÒRUM INDÚSTRIA 4.0

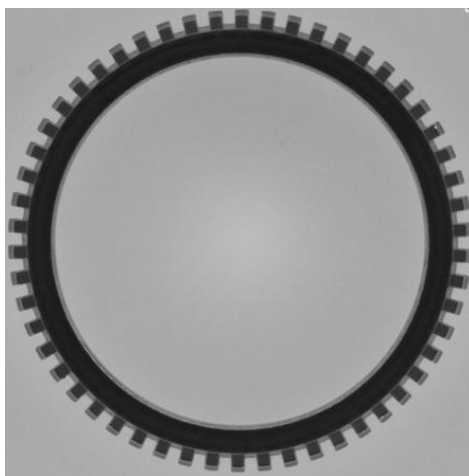
INFAIMON

Especialistas en visión artificial desde hace casi 25 años.

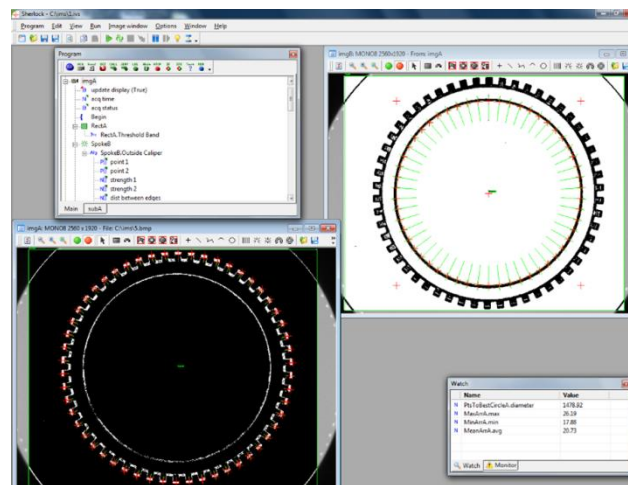


¿QUÉ ES LA VISIÓN ARTIFICIAL?

IMAGEN



DATOS



DECISIÓN





INDUSTRIAL



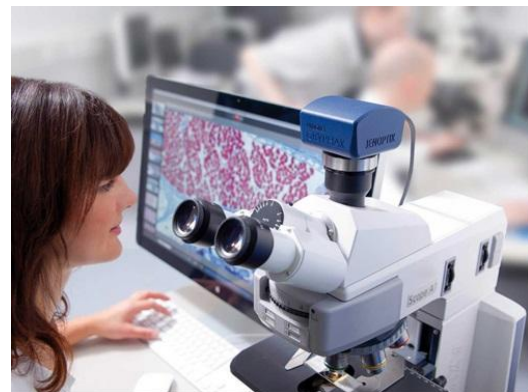
TRANSPORTE



SEGURIDAD



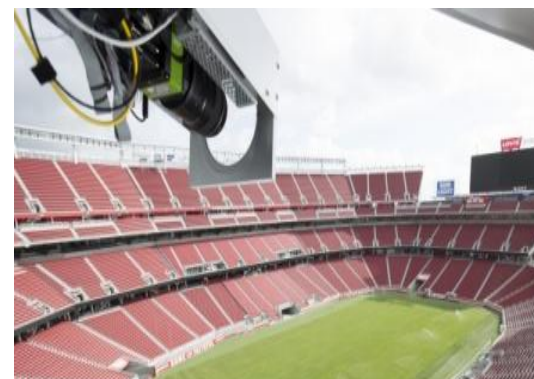
MULTIMEDIA



INVESTIGACIÓN



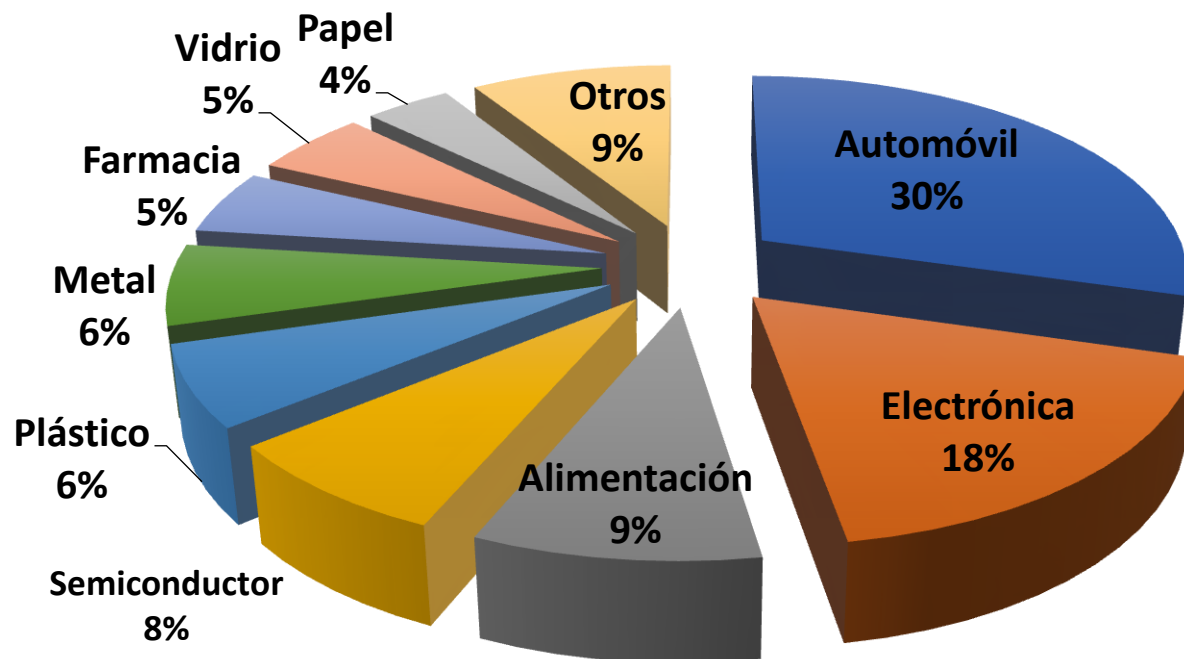
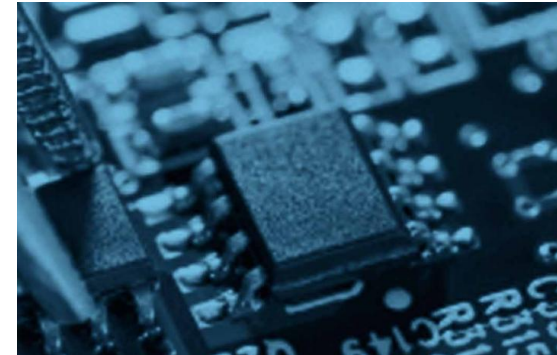
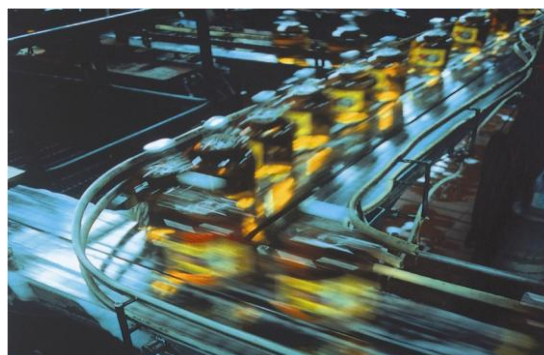
INSTRUMENTACION



DEPORTES



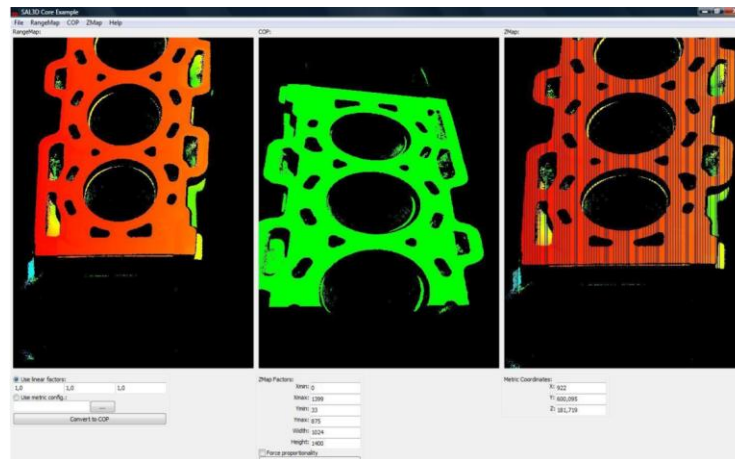
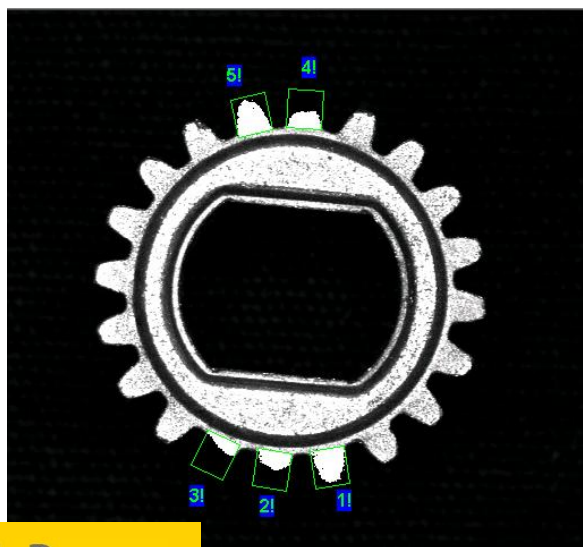
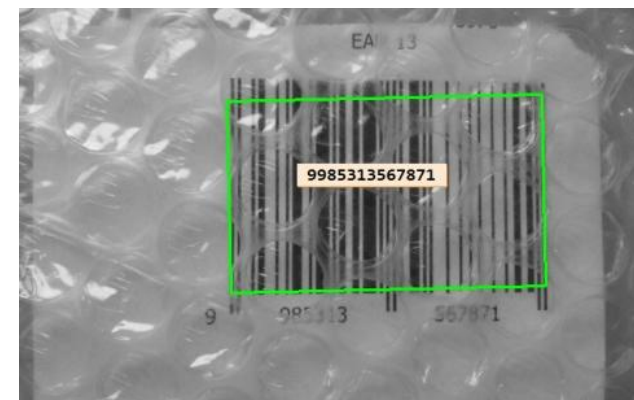
OTROS ENTORNOS



FUENTE: EMVA 2016

¿VISIÓN ARTIFICIAL?

¿PARA QUE?





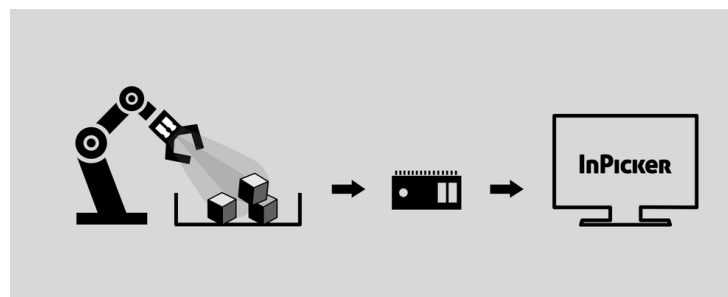
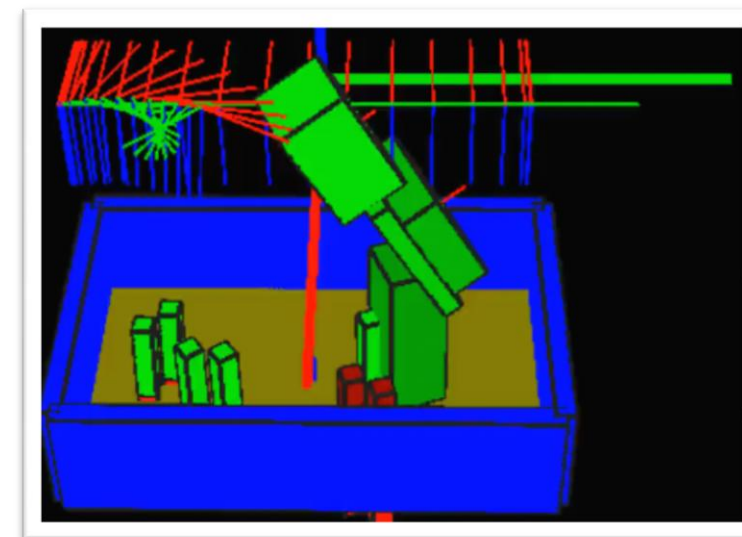
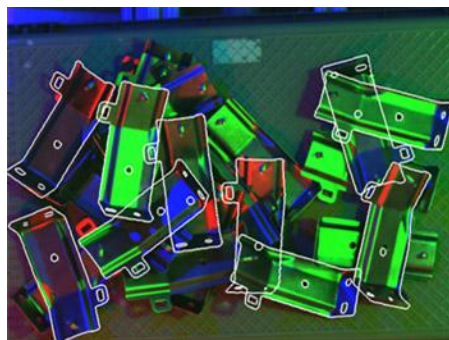
ROBOT DE SERVICIO



ROBOT INDUSTRIAL

DEFINICIÓN

Random BinPicking: Es la capacidad de los robots guiados por visión artificial de agarrar (picking) objetos/componentes distribuidos aleatoriamente (random) dentro de un contenedor (bin), para colocarlos de forma conocida en el siguiente proceso de producción.

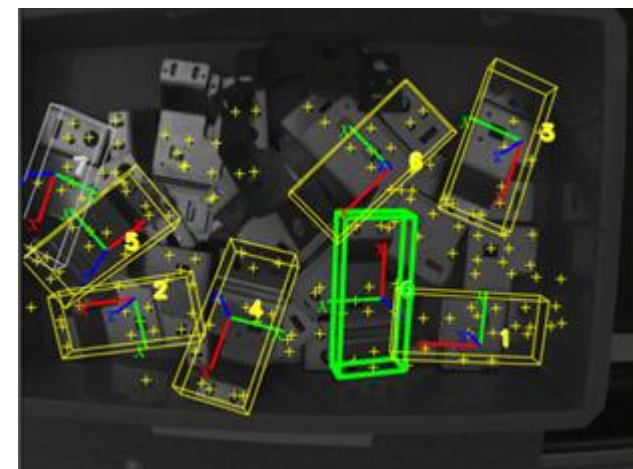
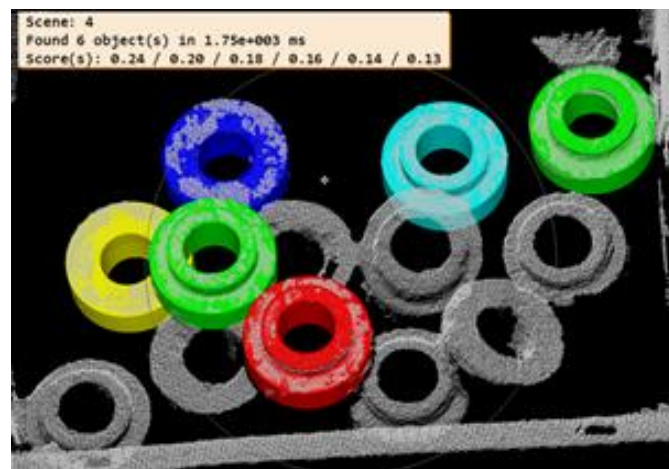
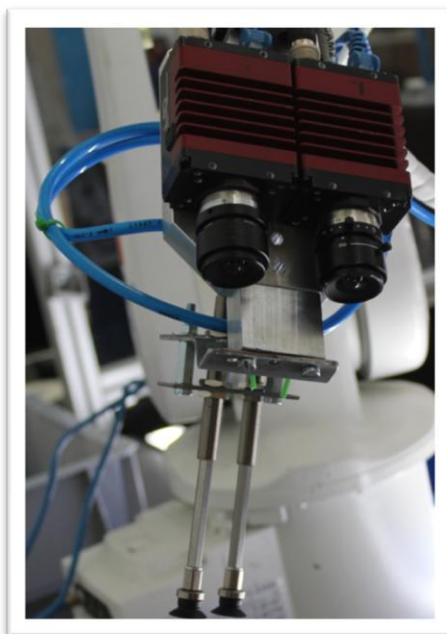


EXPLORACIÓN

CAPTURA

MAPA 3D

**DETECCION
POSICIÓN
PIEZAS 6D**

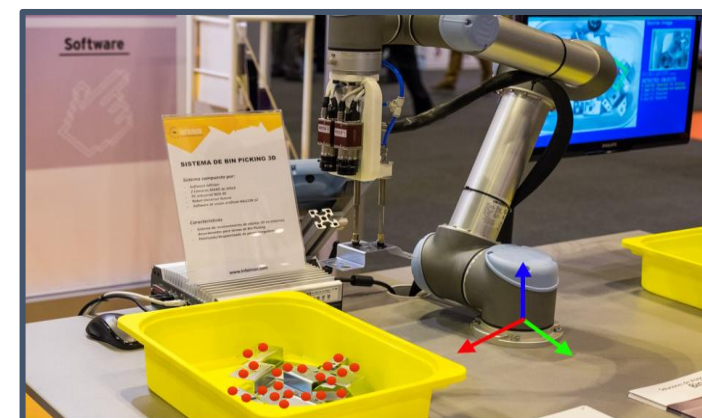
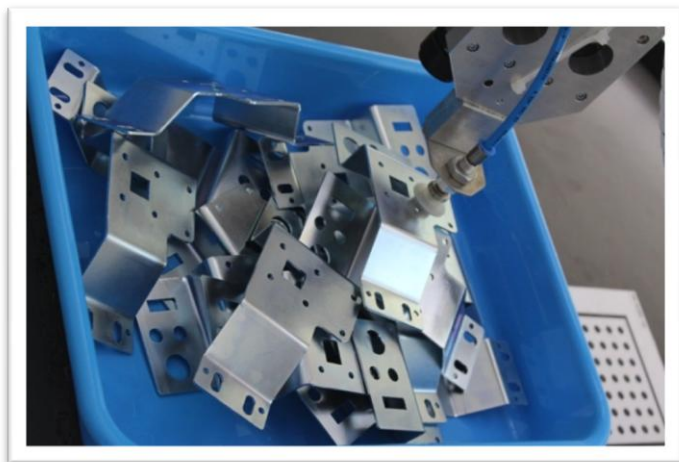


EXTRACCIÓN

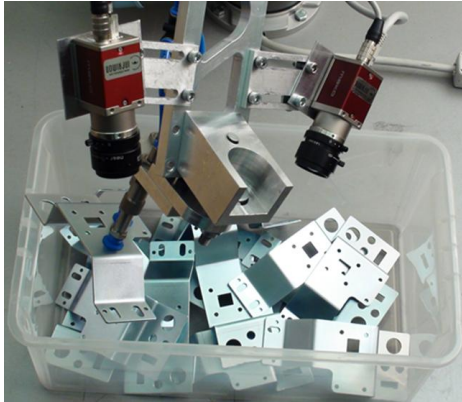
**POSICION DE
AGARRE**

**VERIFICACION DE
COLISIONES**

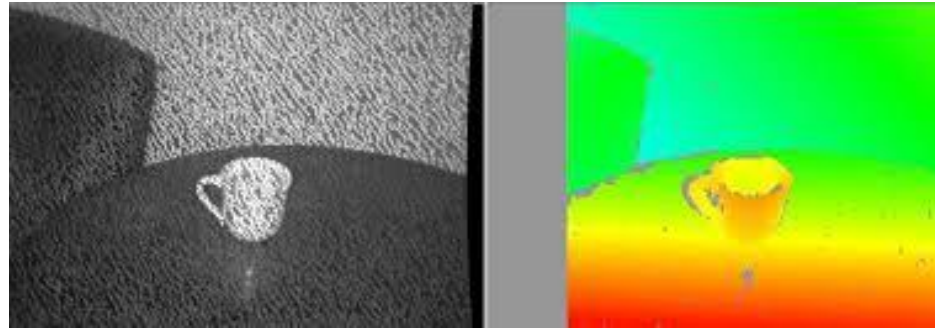
**ENVIO DE
COORDENADAS**



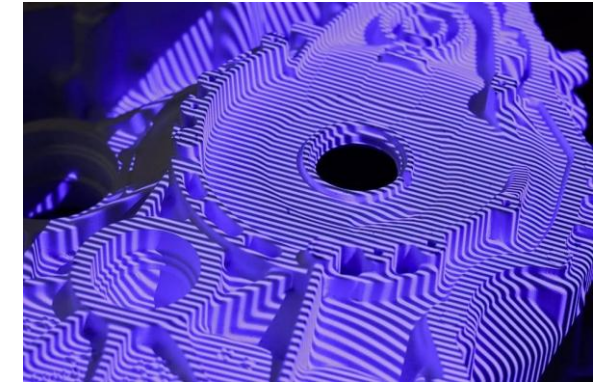
TECNOLOGIAS 3D



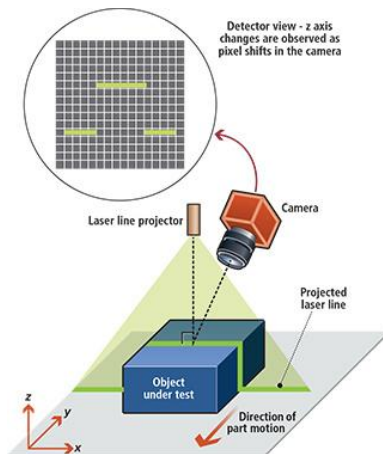
Stereo Vision



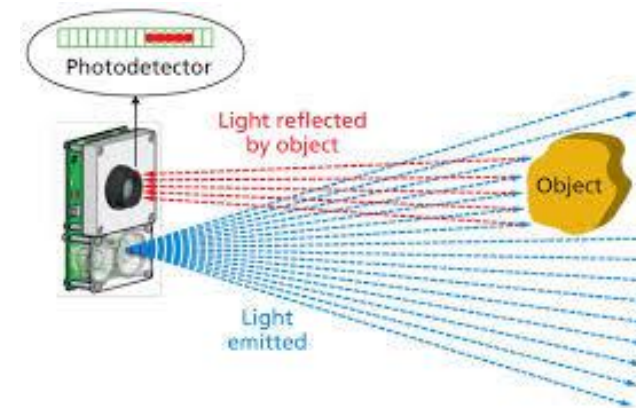
Projected Texture Stereo



Fringe Projection



Laser Triangulation

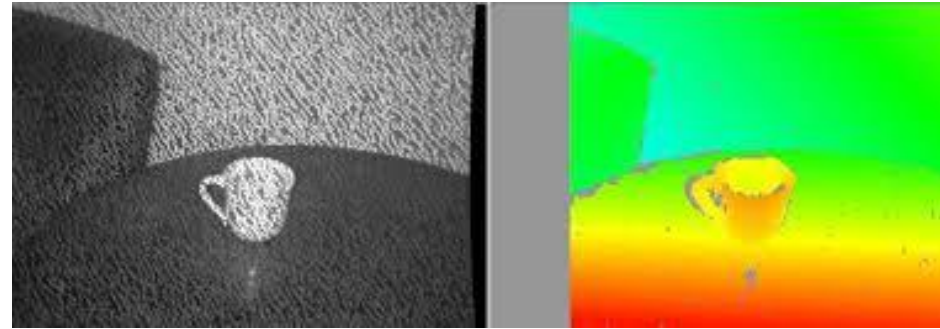


Time of Flight

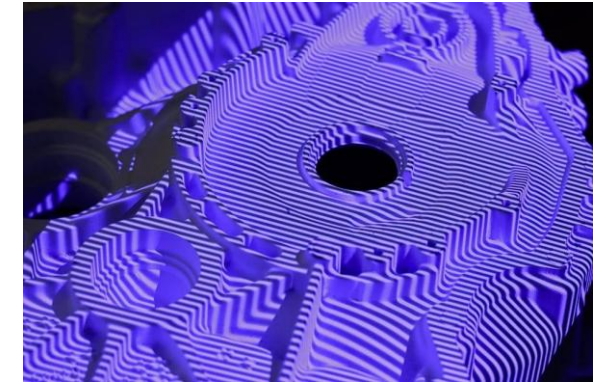
TECNOLOGIAS 3D



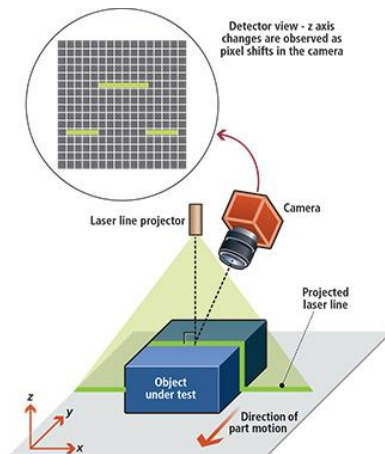
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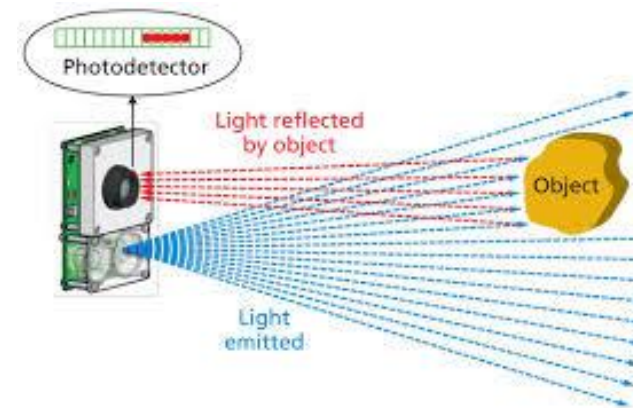
Projected Texture Stereo



Fringe Projection



Laser Triangulation

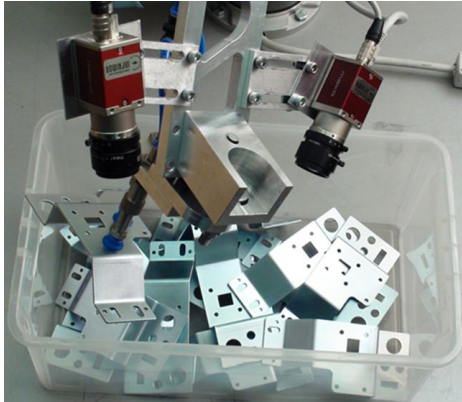


Time of Flight

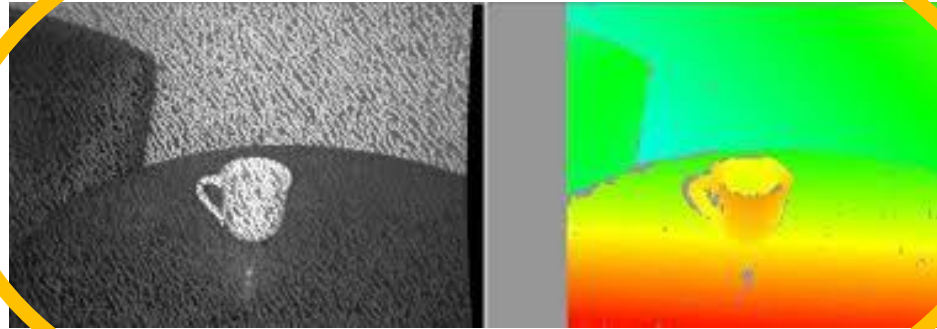
BinPicking



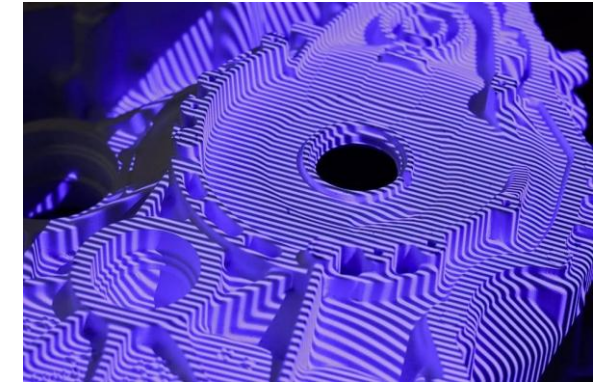
TECNOLOGIAS 3D



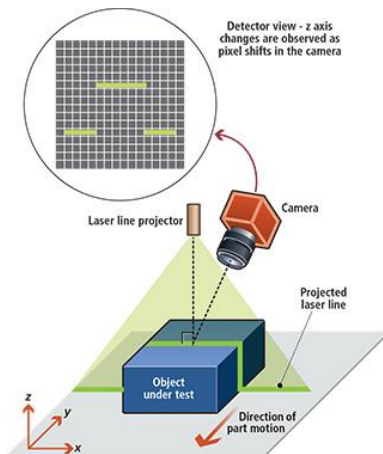
Stereo Vision



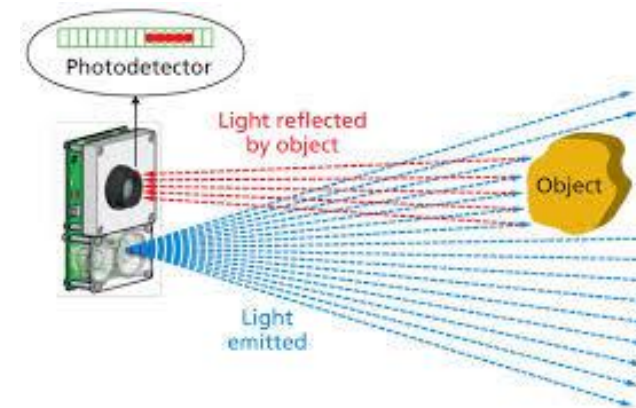
Projected Texture Stereo



Fringe Projection

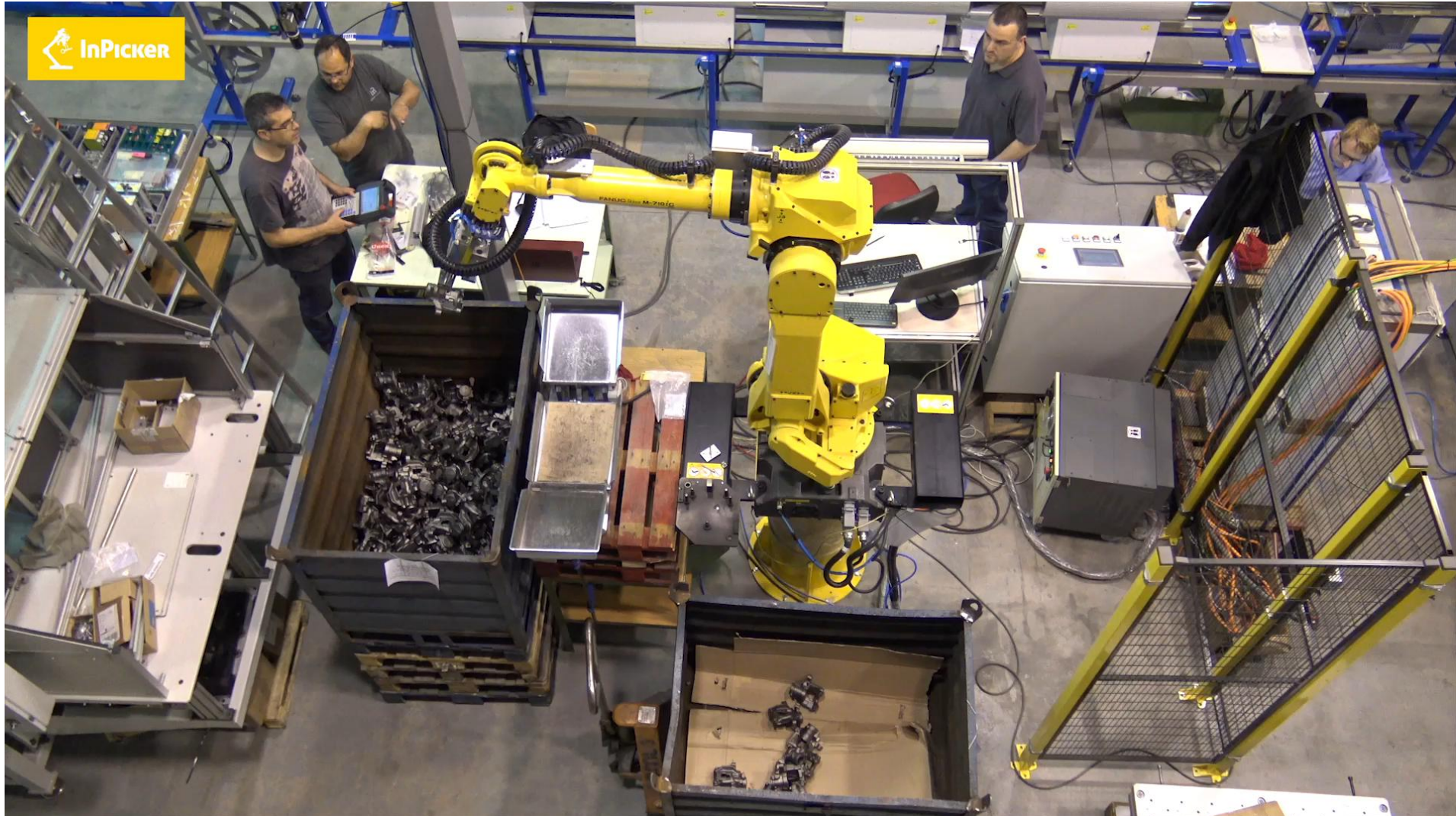


Laser Triangulation

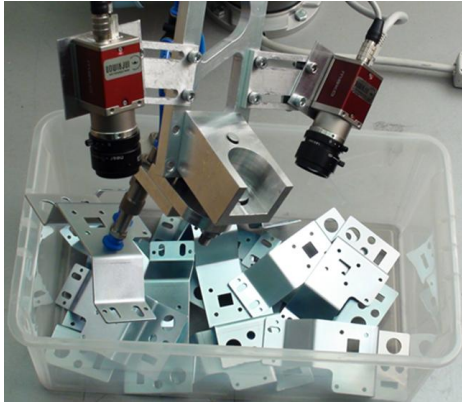


Time of Flight

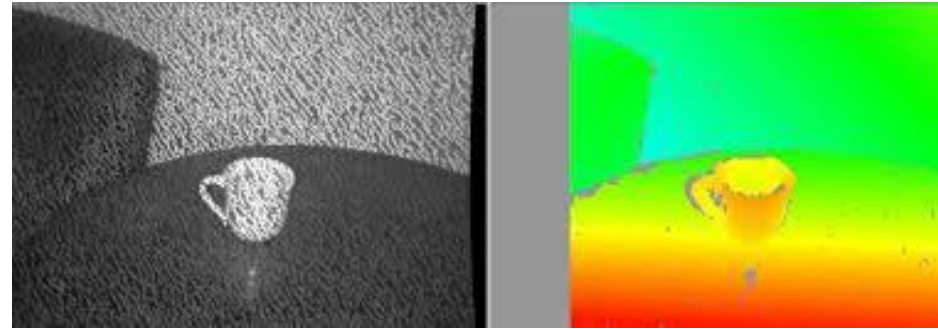
Projected Texture Stereo



TECNOLOGIAS 3D



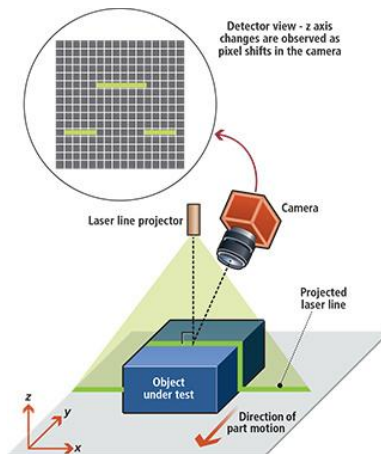
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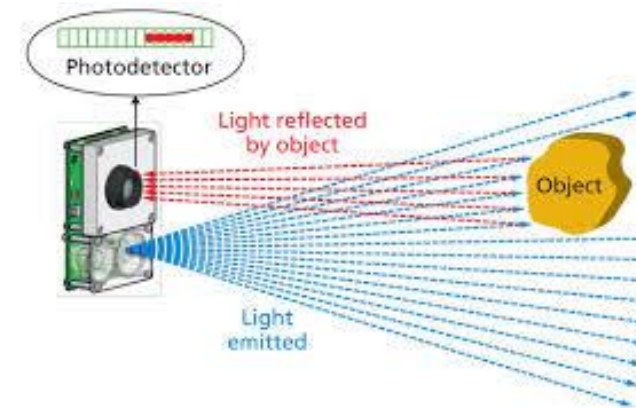
Projected Texture Stereo



Fringe Projection

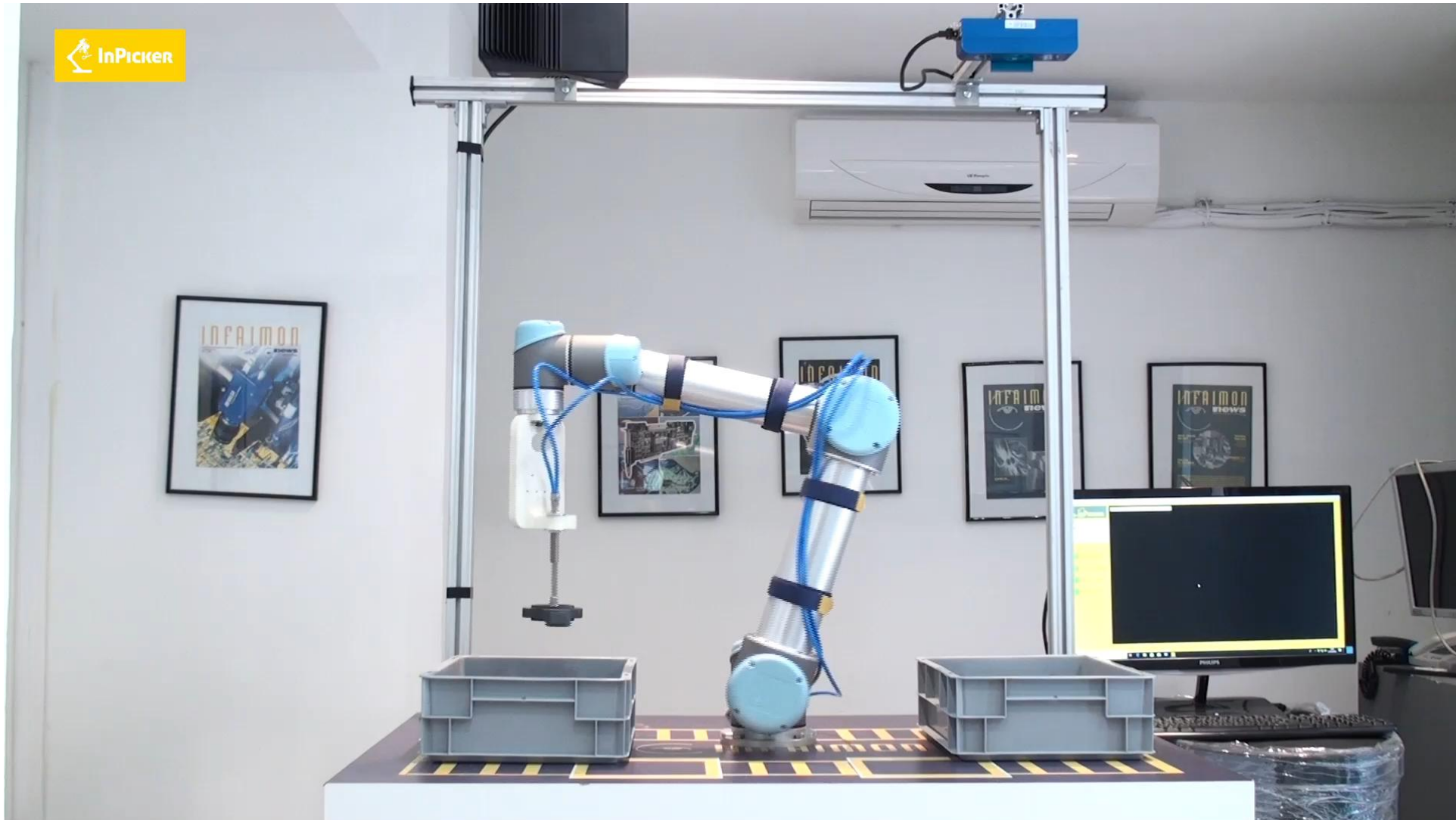


Laser Triangulation

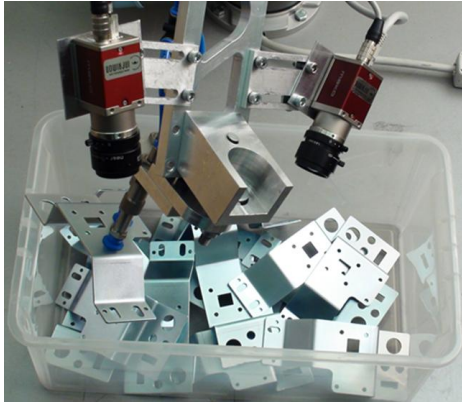


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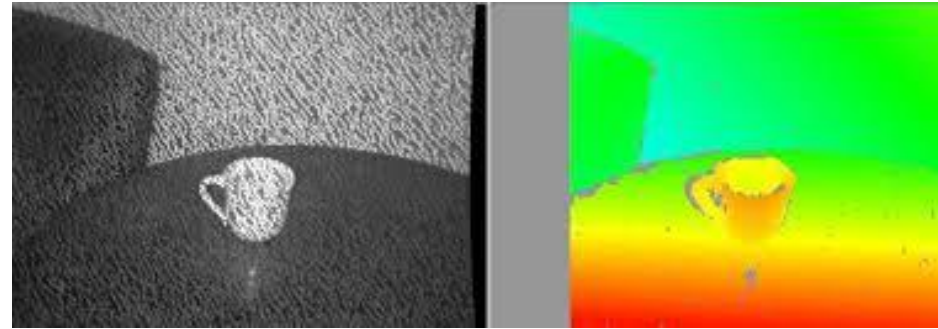
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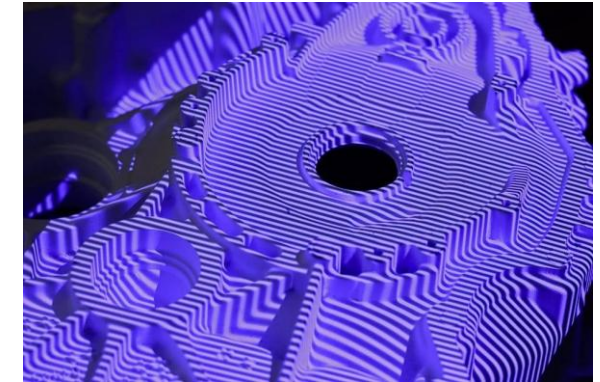
TECNOLOGIAS 3D



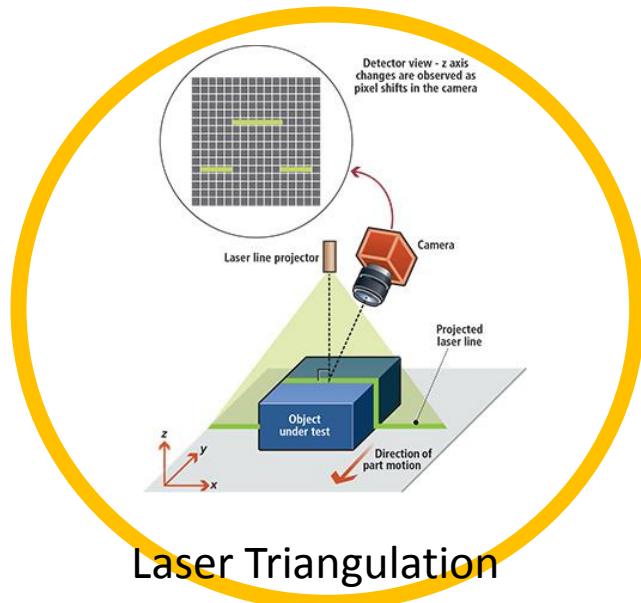
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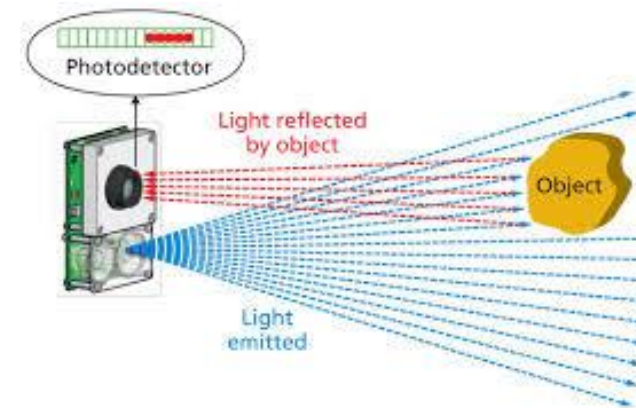
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Laser Triangulation

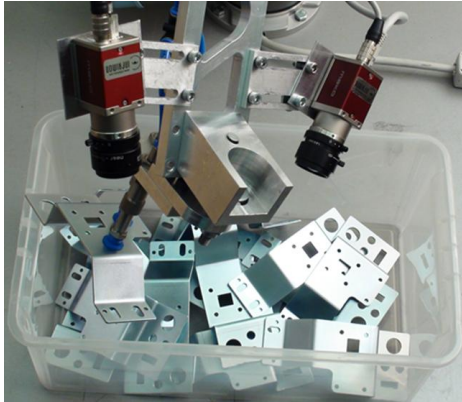


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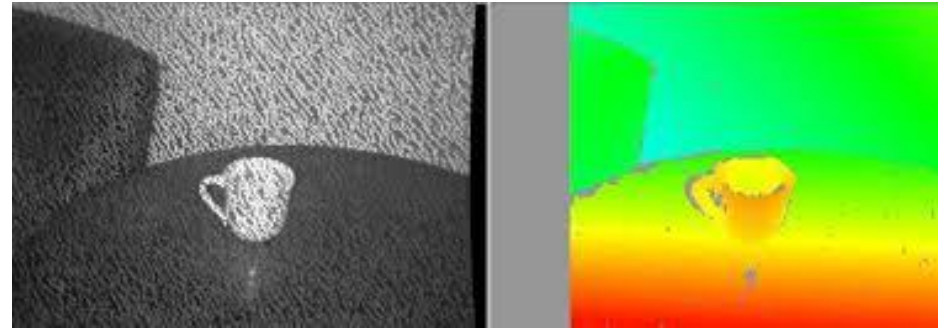
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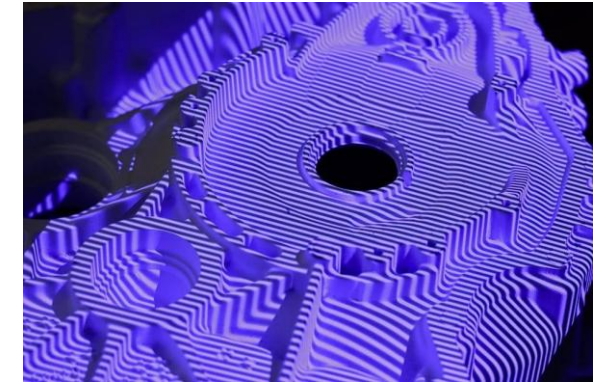
TECNOLOGIAS 3D



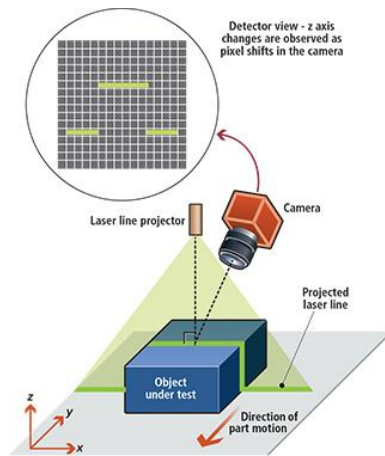
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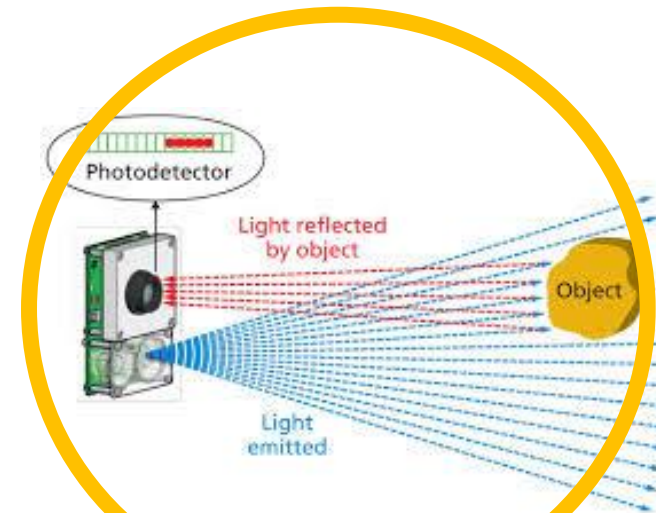
Projected Texture Stereo



Fringe Projection



Laser Triangulation



Time of Flight

Time of Flight



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INGENIERIAS



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