# FANUC

# FANUC

## **Mike Cicco**

President & CEO

FANUC America Corporation





## WHO IS FANUC -AMERICA

WE ARE A TEAM OF PROBLEM SOLVERS

# OUR MISSION TRANSFORMING the WORLD

#### HOW?

## BY SOLVING MANUFACTURING CHALLENGES



FANUC has transformed manufacturing in a number of industries

#### FANUC products make the things we use in our daily lives



# OUR PRODUCTS

**FANUC** ковознот (X-S150**1**В

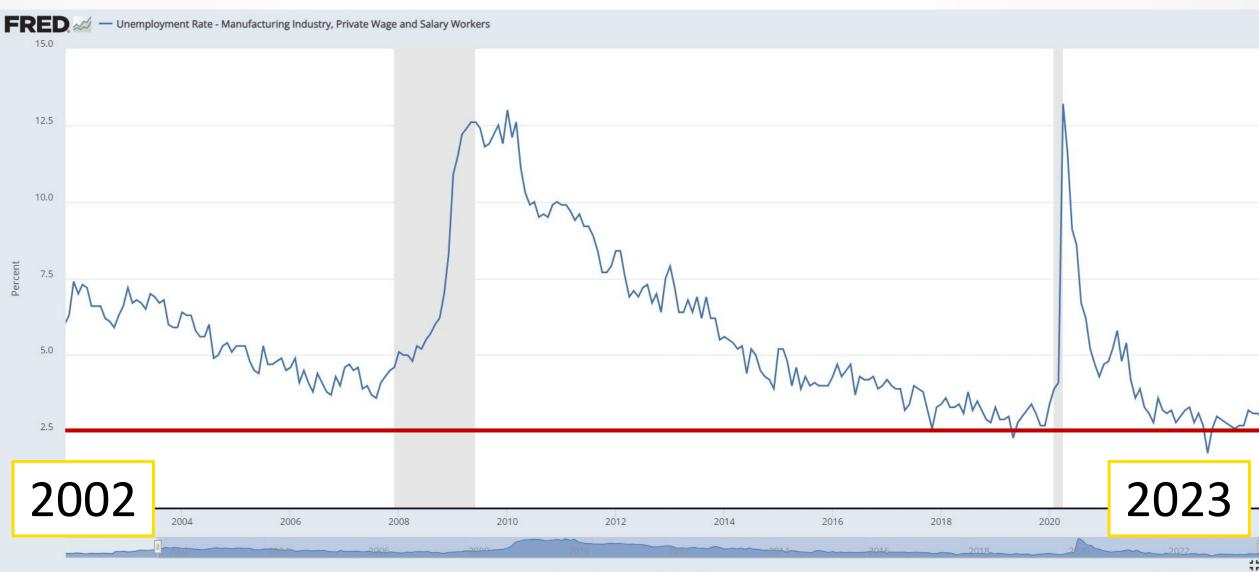
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FANUC provides industry-leading robotics, CNCs, and ROBOMACHINE solutions.

# WHAT WHE JTURE?

## Transformative Power Of: AUTOMATION, AI, EDUCATION

## **Unemployment Rate - Manufacturing**



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

**FANUC** 



#### **Unemployment Rate –** since 1960!



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org



## Job Openings - Manufacturing



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org



## **Capacity Utilization - Manufacturing**



Shaded areas indicate U.S. recessions.

Source: Board of Governors of the Federal Reserve System (US)

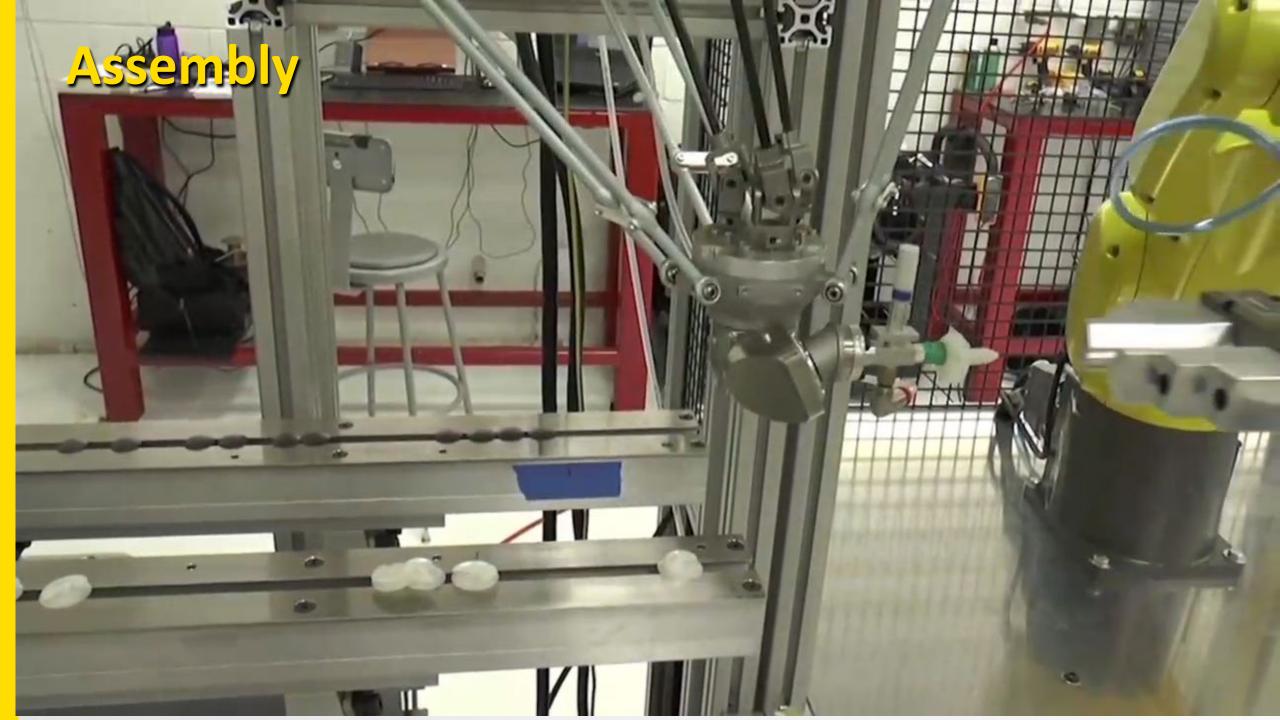
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# AUTOMATION

## Machine Tending

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10 TON SERIAL #15031



## Flash Removal

T

## Lights-Out Machine Tending

MF

MF-PR01-03

MF-PRO1-02

MF-PRO1-04

#### 2:03:03 AM

## **Plastic Recycling**

PANUC REA

6

TIPP

A 1 32 3 44 1 47 48 71

minin

## Ultrasonic Welding



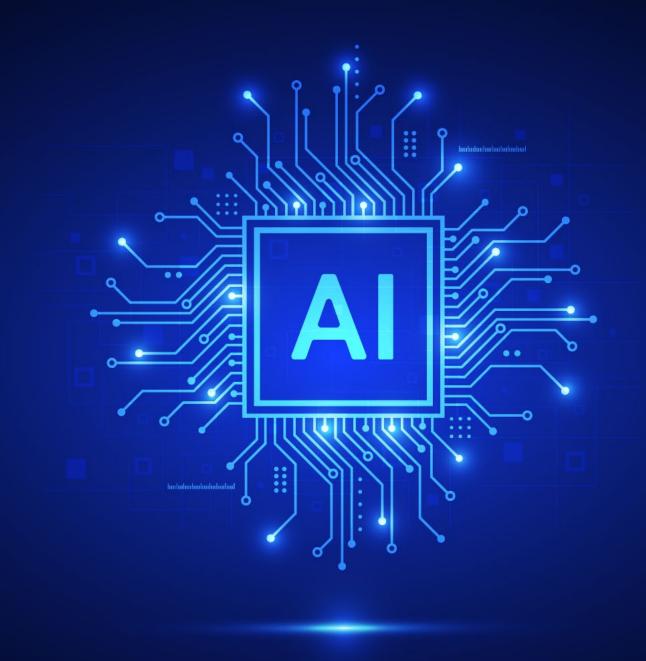


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## Vinyl Surface Flame Treatment

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GAI TEX DEW CAB VIN







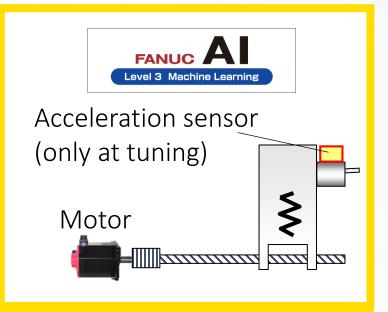
## Examples of AI used in Industrial Systems Today



#### **Computer Vision**



Machine Learning for Quality Control



#### **Machine Tuning**

## Al Vision for Quality Control



600

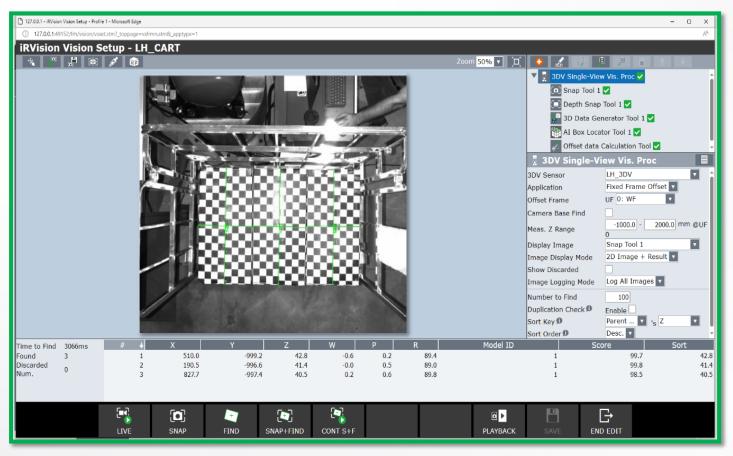
#### FANUC

## FANUC *i*PC Machine Learning

#### **Vision Challenges**

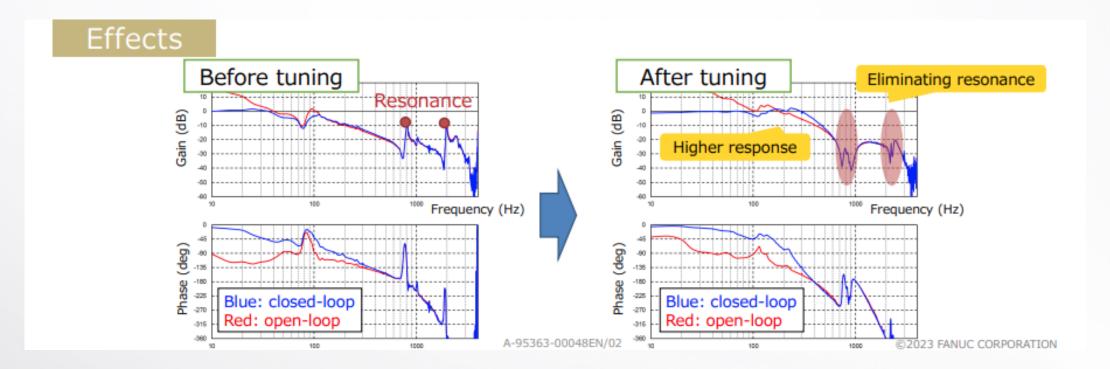
- High Contrast
- Tightly Packed Boxes
- Difficult pattern to segment box edges properly.

#### **3 Boxes Found**

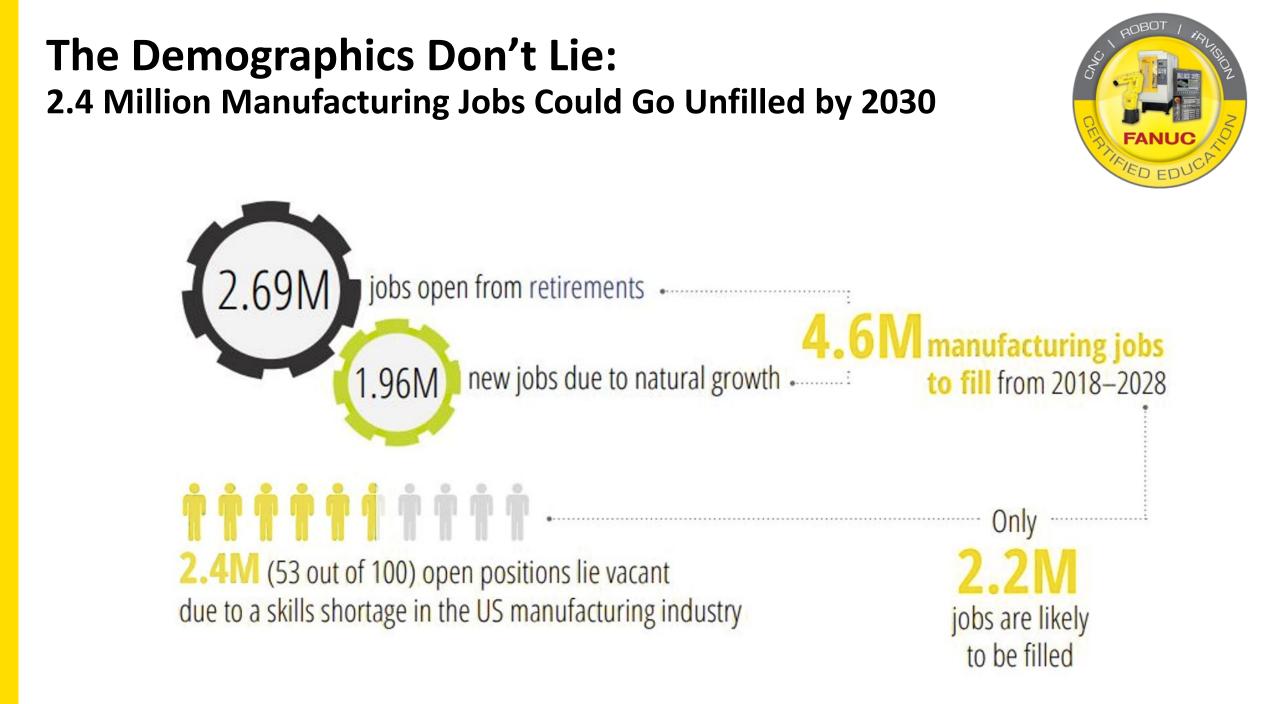




## **Al Servo Tuning**



## EDUCATION





## **Aligning Industry and Education**

## 1,600 EDUCATION PROVIDERS

**1500+** Certified Instructors **70,000+** Students Introduced Annually **1,000,000+** Unique Experiences

- A successful workforce strategy starts with acknowledging that you won't solve your current hiring challenges by applying the solutions of the past.
- Alignment to talent needs is a primary factor along with defining career pathways and upward mobility and flexibility.





## Thank you!