



# Software for manufacturing robots

NOSA EDOIMIOYA | SEPT 2024

## MAKING REFORGE ROBOTICS

Twenty years later, one brave decision led to another

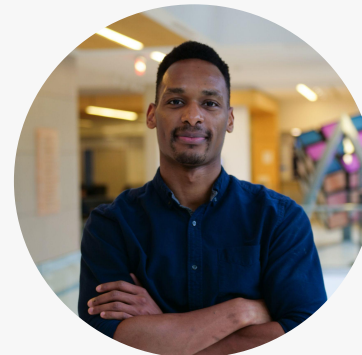


2004



REFORGE  
ROBOTICS

2024

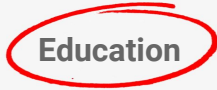


## CONTEXT

Manufacturing creates wealth and opportunities



Film



Restaurants



Mobility



Housekeeping



Photography



AI



## REFORGE'S MISSION – narratives

# Expanding manufacturing access

**S** X  
STAN BURK

**F**

**M** X  
MICH GHA

**H**

2016

2019



Manufactured solar egg incubator in USA and shipped to **Burkina Faso**.



Difficult to import supplies for teaching robotics and manufacturing in **Ghana**.

## REFORGE'S MISSION – narratives

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Today, manufacturing in the US is **expensive** and **inefficient**.

## PROBLEM

Machines are bulky, expensive, and hard to program

2500 cubic feet  
\$600K – 1M



Five-axis CNC machine



Push-button  
programming

“CNC machining” means carving metal



Aerospace



Automotive



Medical



## SOLUTION

# Use robots! (and make them more precise)

250 cubic feet (**10x less**)

\$60K – 100K (**10x less**)

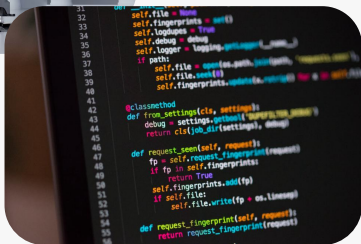


Industrial robot arms

But robots **vibrate** when cutting metal



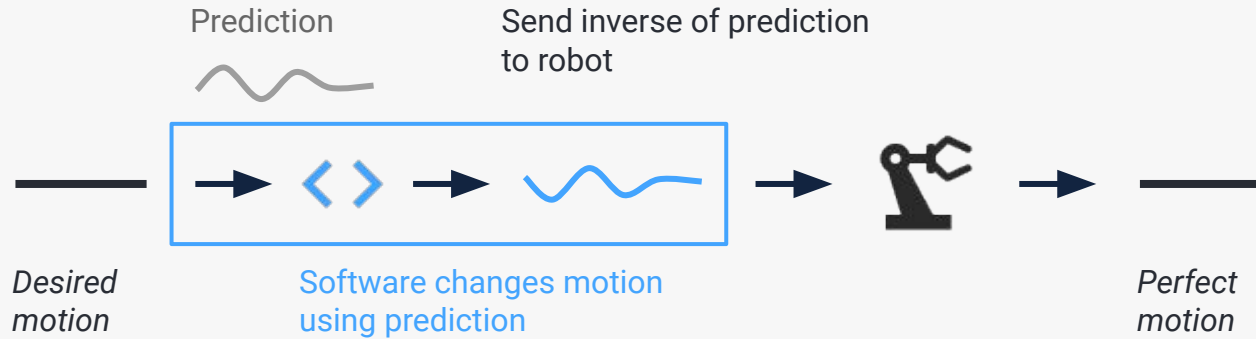
Less precise than CNCs



Modern script programming

## SOLUTION – proprietary anti-vibration software

# Remove vibration with software compensation



Manufacturers' requirements	Reforge's software
Custom manufacturing setup	✓ Scalable robot calibration for custom assemblies
Minimize vibration from cutting forces	✓ Eliminates up to 98% of robot vibration
Maintain high tolerance (accuracy)	✓ Leads to increased accuracy



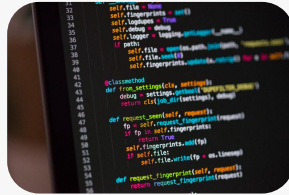
## PRODUCT & BUSINESS MODEL

Contract manufacturers buy robots with our software



Commercial robot

X



Reforge's software

=



**Equivalent five-axis CNC**

~2-7x lower cost

~10x more efficiency

## MARKET

Large and growing – start in the USA and expand

### Total Market Size

**\$100B** (Global)

500,000 CNC machines sold annually

5.0% Compound Annual Growth Rate

### Initial TAM

**\$4.3B** (USA)

18,000 manufacturers

2 robots / manufacturer (avg.)

**Lease robot \$100k / year (purchase: \$350k / robot)**

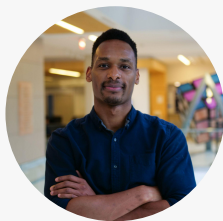
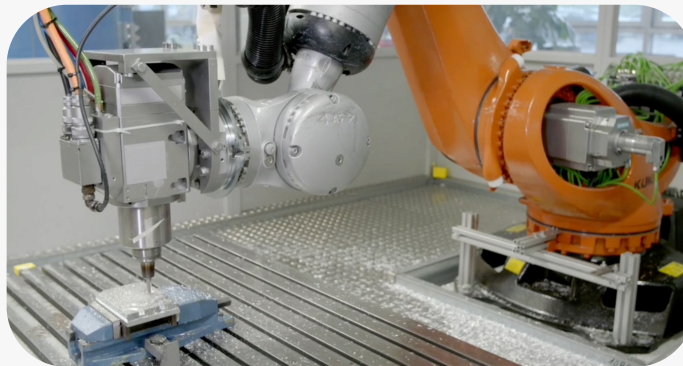
**+ software subscription: \$20k / robot / year**

## PARTNER WITH US

**Status** – executing MVP and customer pilots

**Funding** – pre-seed; raising seed in mid-2025

**Ask** – introductions to customers & investors



**Nosa Edoimioya**  
Founder & CEO  
Prev: Robotics @  
Stanford & Michigan



**Kaveh Berenji**  
Founding Engineer  
Prev: Robotic machining  
@ Georgia Tech



**Evan Beard**  
Advisor  
Founder & CEO @  
Standard Bots