

The future of work in manufacturing

What will jobs look like in the digital era? ROBOT TEAMING COORDINATOR

A DELOITTE SERIES ON THE SKILLS GAP AND THE FUTURE OF WORK IN MANUFACTURING



ROBOT TEAMING COORDINATOR

Summary

It is 2025. The increasing penetration of robots in manufacturing production and distribution is driving demand for professionals known as robot teaming coordinators (RTCs) who train humans and robots to work together collaboratively. Key enablers of a collaborative humanmachine workforce, RTCs oversee robots from all functions that interact with humans to enable human rapport with robots and ensure optimal human-machine interactions.

RTCs are an evolution of the typical process engineer and change management experts in manufacturing enterprises. These individuals typically design business processes that integrate robotics into production and distribution operations while also considering the enduring human skills that employees bring to the value stream. They often assist employees in adopting the new, robotically augmented processes. RTCs understand the human elements that are in play at the hand-offs between robots and humans and help create a harmony that optimizes the strengths of both partners in the integrated workstream.

The RTC is generally responsible for monitoring robot performance and providing feedback to programmers to optimize robot value. Unlike robot programmers, RTCs are often not experts in programming languages, but should have the required skills to understand how robots are supposed to behave in work environments.

Time spent on activities



Responsibilities

- Observes robots and evaluates their performance based on how effectively they can perform predetermined tasks
- Shares feedback with robot programmers on a robot's performance and recommends areas for improvement
- Trains human team members to help them work more collaboratively with robots in a coworking environment
- Works in tandem with robot coordinators from other departments to identify opportunities where robots can be deployed to enhance productivity
- Delivers results against key performance indicators such as enhanced customer experience, human-hours saved, and overall improvements in productivity

ve tasks	
40%	25%
20%	10%

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Skills and endorsements



OLIVIA DAVIS

ROBOT TEAMING COORDINATOR Breeze Turbines | *Hull, United Kingdom*

Proficient in unlocking growth and productivity by enabling a collaborative human-robot working environment; applies a mix of digital, social, and human skills to enable humans and robots to leverage each other's strengths and help the firm grow.

Experience

Robot teaming coordinator

Breeze Turbines Oct 2024–present | 1 year 1 month Observes and manages robots while they perform live tasks on a factory production line, identifying ways to augment human tasks that are repetitive; works closely with factory workers to pair them with robots in a way that maximizes productivity; handles employee concerns about working with new robots, and builds rapport between humans and machines on the production line

Customer interest representative

Al Robotics Limited Jun 2022–Sep 2024 | 2 years 4 months Interacted with various customers to understand feedback and capture important requirements for the company's robotic products and services; worked with various teams within the company to understand the capabilities of the robots; provided a demonstration of robots to premier clients

Talent facilitator

StarMovies Company LLC Jun 2020–May 2022 | 2 years

Helped coordinate directors, artists, and other crew members for many leading TV commercials; in several cases, worked as robot assistant for commercials that included robotic products

Education

University of Illinois Bachelor of science, psychology 2016–2020

Other certifications

• EdX Microdegree in human psychology

- Morgan Community College
 Certificate in humanities
- OpenLearnOrg Robot programming for nonprogrammers



Behavioral analysis - 412

Bndorsed by **James**, who is highly skilled at this

Human-machine collaborator 324

Endorsed by **Robert** and **Patricia,** who are highly skilled at this

Robot management · 246

Endorsed by **Sid** and **Byrne**, who are highly skilled at this

Administration • 195

Endorsed by **Tracy** and **Joe**, who are highly skilled at this

Motion capture · 86

Endorsed by **Jessica**, who is highly skilled at this

Social skills · 85

Endorsed by **Elizabeth** and **Susan**, who are highly skilled at this

Customer service · 79

Endorsed by **Yoanne**, who is highly skilled at this

Technical training and orientation .68

Endorsed by **Heather** and **Ryan**, who are highly skilled at this

TOOLBOX

THE TOOLBOX SUPPORTS THE WORKER AS A WHOLE—IN ACHIEVING EXTERNAL OUTCOMES SUCH AS PRODUCTIVITY AS WELL AS INTERNALLY FOCUSED ONES SUCH AS DECISION-MAKING AND LEARNING.

Productivity



Venus

This AI-powered, voice-enabled digital assistant provides a conversational interface for all productivity-related tasks, from scheduling to finding answers to questions and checking the status of products and projects.



Visually Trainable Robot (VITRO)

This is a personal multipurpose humanoid robot whose size and capabilities make it suitable for individual use. It can be visually programmed by its user through motion capture software and trackers to perform household tasks. VITRO also has cloud-connected artificial intelligence (AI) capabilities that help it to optimize tasks even further.



rMIMIC

This motion-capture AI tracker can scan and track the various sensors placed on a human body and create coordinates in a digital space. The tool then translates the recorded coordinates into a set of commands and shares with the target VITRO to execute.



VirtuMeet

This AR smart-glass conference room with AI capabilities allows global partners to meet and collaborate, overcoming the barriers of physical separation. With built-in AI, AR screens can present short bios or other relevant information about attendees as the user pans across their faces.

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Share Smart

An enterprise social and mobile technology tool that helps in sharing digital 3D designs and images as digital files to improve the collaboration necessary to build a new product, supply network configuration, or assembly line right the first time.

Rosetta

An AI-based real-time language translator that listens to speech, converts it into text, and then translates that into the desired language, enabling collaboration among different regional markets.

VizWizard

A visualization tool that can create graphs and infographics with minimal text inputs from the user. It is also capable of creating topline results based on information available in charts.

Decision-making



Smart Dash



RealConnect

This application enables an engineer to seamlessly interact with suppliers, partners, customers, and the broader ecosystem.

Learning



A social media interface run for and by the users. An individual can express their desire to augment a specific skill or post a problem, and other users proficient in that skill can act as a temporary buddy for help. This social learning tool employs gamification, in which both the learners and teachers "win" learning points.

A visual display that presents data, live information, and analysis from multiple sources to

A DAY IN THE LIFE

06:30 AM	Olivia feels a gentle nudge and a vibration on her hand. Through her half-opened eyes, she sees Ardennes—her personal VITRO—waking her up. After days of Olivia teaching the robot through rMIMIC, Ardennes was not only able to correctly identify Olivia's right arm but was also able to nudge and vibrate gently enough to break her sleep. Happy with the results, Olivia gets up from her bed and says, "Hey, Ardennes, can you make the bed, get the laundry ready, and then park	12:00 PM	After a busy morning, Olivia br she connects over lunch with h another division of the compa ideas.
	yourself in the garage?"	02:00 PM	It is time for Olivia's Rosetta-er the Barcelona metal fabricatio
07:30 AM	As Olivia gets on a train to head into her office, Venus—her smart personal assistant—reminds Olivia that she has a 10 a.m. meeting with Lee, a metal panel fabrication plant manager based in Barcelona.		are helping everyone enhance the workers that the humanoi more opportunities for them t lengthy question-and-answer to mitigate workers' fears and
08:30 AM	Once in the office, Olivia asks ShareSmart to connect to the company data repository and download the previous night's video footage and corresponding data metrics for all the robots on several production lines she's been tracking.	04:00 PM	After her meeting, Olivia create leadership team, highlighting a different departments that the
10:00 AM	During her meeting with Lee via a Rosetta-enabled VirtuMeet conference room, Olivia learns that the new sheet metal cutting-and-painting robot has been working with zero errors. However, the humanoid robots deployed on the plant		behaviors. The status report h where efficiency has been ach
	floor to move objects around have been having a bit of difficulty navigating through a crowded workspace.	05:00 PM	Back on the train to her home, looking for help in managing h based senior robot coordinato
11:00 AM	After the meeting, Olivia calls on Venus to show the humanoid robots' movement on Smart Dash. Olivia's observations and the heat map of the robots' movements reveal that the robots are moving as per the defined guidelines. Realizing that the issue is with the human workers on the floor, Olivia asks Venus to set up a RealConnect meeting with the fabrication manager and the workers on that assembly line.		

A day in the life

breaks for lunch at a nearby coworking space. There, her other friends who are process engineers at any. They discuss some interesting case studies and

enabled RealConnect meeting with the workers from on team. Olivia explains how the humanoid robots e productivity and efficiency. She also explains to id robots are performing repetitive tasks, creating to do work where their skills are required. After a session, Olivia utilizes her human psychology skills d convince them to work with robots.

tes and shares the VizWizard report with her all the process-efficiency improvements across le factory achieved by creating a congenial humankly identifying and fixing anomalies in robot nelps the senior VP and her team identify areas nieved.

e, Olivia logs in to her LNP portal to post that she is human-machine conflicts. Soon she finds a Germanyor offering her help.



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