Key Takeaways

The Fourth Industrial Revolution is in full swing, with manufacturers acutely focused on leveraging technology to keep up with competition and demand.

Data collection obsession (through sensors, robots and A.I.) will improve performance and fuel competition.

Supply-chain issues are encouraging some manufacturers to bring tech manufacturing back "onshore."

Resources



Check out Dice's

Employer Resource

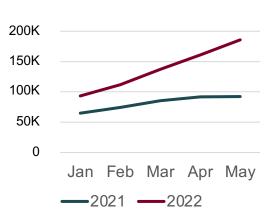
Center for eBooks,
webinars and more on tech hiring.

Jan. 1 - May 31, 2022

Industry 4.0 technologies that support the cyber-physical transformation of manufacturing are becoming a standard for top manufacturers. The data collection that these technologies offer (through sensors, robots and A.I.) are identifying efficiencies, cutting costs and improving forecasts and predictability. The bottom line? Manufacturers need technologists to build, maintain and manage these technologies now.

U.S. Tech Job Postings in Manufacturing

Demand for tech talent in manufacturing has increased exponentially since the beginning of the year, with the number of tech job postings in May 2022 more than double what it was in May 2021.



Top Occupations

Rank	Occupation
1	Software Engineer
2	Principal Software Engineer
3	Systems Engineer
4	Electrical Engineer
5	Principal Systems Engineer
6	Embedded Software Engineer
7	Data Scientist
8	Software Developer
9	Business Analyst
10	DevSecOps Engineer

Calling all engineers, from
Software Engineers to Electrical
Engineers! Manufacturers across
the U.S. are searching for
engineers to help them become
and remain competitive in a
rapidly evolving industry. Security
is also a concern with the move to
cyber-manufacturing, and
requires DevSecOps Engineers
who can see that security is
prioritized and established
throughout production.

Data Scientists and Business Analysts are also on the list to help companies identify and implement efficiencies across processes.

Top States

California, Texas, Washington and Illinois are home to some of the nation's largest manufacturing companies, all of which need a considerable amount of technology talent. Other states are doing their best to pull in manufacturing facilities along with engineers and technologists; for example, Arizona, which broke into the top ten on this list, is home to two new Intel chip plants. Supply-chain issues have convinced many companies to invest more in U.S. manufacturing over the long term.

3. Washington 5. Michigan 7. Mass. 6. Colorado 9. Arizona 2. Texas 8. Florida

Top Tech Skills

Rank	Skill
1	Computer Science
2	Agile Methodology
3	Software Engineering
4	Python
5	Software Development
6	Automation
7	C++
8	Systems Engineering
9	SQL
10	Java

When it comes to in-demand skills, manufacturers want technologists who have mastered automation, C++ (which is often used in embedded systems, for example) and systems engineering (which is the development and maintenance of complex systems).

Python, Java and SQL are likewise driving many manufacturing companies' hiring; those who know these languages can assist in everything from data analytics to database management. Depending on what's being manufactured, technologists who've mastered the intricacies of software interacting with hardware have a job-hunt advantage.

Top Employers

Defense technology and computer solutions dominate the list of top employers of tech talent in the manufacturing industry. After having to lay off employees during the pandemic, Boeing went on a <u>hiring spree in April, hinting at a rebound</u>.

Growth in demand for tech talent also makes sense for Dell: They <u>recently reported record</u> <u>revenue</u>, largely from their data center servers, networking and storage business arm.

Rank C	ompany
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1	Boeing
2	Dell Technologies
3	General Motors
4	Northrop Grumman
5	Raytheon Technologies
6	Applied Materials
7	Intel
8	L3Harris Technologies
9	Apple
10	Danaher