

Skills Summit 2026



Insights Report

RIT | Certified

certified.rit.edu

Market Signals | Workforce Implications | Regional Context

**With gratitude to the
Ralph C. Wilson, Jr. Foundation &
The ESL Charitable Foundation
for their generous support of this work.**



RALPH C. WILSON, JR.
FOUNDATION



Welcome to Skills Summit 2026

In conversations with employers across our region, I often hear different versions of the same question: What will our people need to know and be able to do as the work changes?

A manufacturer may be thinking about automation or the expertise leaving with experienced employees. A healthcare organization may be working through how AI fits into clinical and administrative work. A bank may be weighing new tools against questions of risk, governance, and trust. In each case, the skills required at work are changing, even when the job titles are not.

Our analysis shows that skill requirements are shifting within established roles, and AI-related skills are appearing in a growing share of job postings across the industries we examined.

The timing matters for our region. The NY SMART I-Corridor is bringing significant investment and new opportunity to our communities. At the same time, more than a quarter of the advanced manufacturing workforce in each of the I-Corridor's three major metros is age 55 or older, including 35 percent here in Rochester.

We have new skills to build and a great deal of existing knowledge we cannot afford to lose.

As we think about the future of work, we need to discuss it with the people who are making decisions about work now.

We created the RIT Certified Skills Summit to bring those people together. *Skills for the Work Ahead* is a continuing series, and AI is our first topic. The Insights Brief is meant to contribute evidence to the conversation by looking more closely at changes that may be easy to miss in broader labor-market trends. Labor-market data can help us see where change is showing up. And the experience of employers can help us understand what that change actually means.

I hope you will bring both your experience and your questions to the Summit. Tell us where the data rings true and what we may be missing. I also hope you will take this Brief back to your colleagues and use it to continue the conversation inside your own organization.

I am very glad you are here, and I look forward to hearing what you think.

Rosalie Clemens

Executive Director, RIT Certified

Employers

Regional talent demand, occupational exposure, and organizational readiness

Effective adoption of new technology depends on a range of structural and strategic capabilities within an organization. The MITRE AI Maturity Model represents one way of illustrating the essential interconnectedness of technology adoption and broader organizational functions. Methodologically, the pillars of the MITRE model also underpin our measurement of AI enablement skills, helping reveal that employers are not converging on a single hiring profile for new workers. While Software and IT Services emphasizes direct technical expertise, other industries place equal or greater weight on these vital AI enablement capabilities. Further analysis shows how AI may function as either a complement or substitute for workers, depending on occupation. This suggests that employers may decide to pursue targeted upskilling for roles where AI is likely to augment incumbent workers' productivity, while focusing on structured retraining for positions facing higher automation risk. To support these workforce decisions, this section concludes with a guide to regional resources, outlining programs and funding designed to help organizations execute their modernization, training, and retention strategies.

Additional information on sources and analyses can be found online:

certified.rit.edu/skills-summit-insights

The MITRE AI Maturity Model

A framework for assessing organizational readiness for AI adoption.

The MITRE AI Maturity Model (AIMM) is a framework for understanding an organization’s progress toward effective AI adoption. Organized around six pillars, the model addresses considerations ranging from culture and user trust to data architecture and security. By creating a common language around AI adoption, AIMM helps organizations assess their current state, identify strengths and gaps, establish priorities, and structure a roadmap for advancing AI capabilities in a systematic and measurable way.

 Ethical, Equitable & Responsible Use	 Strategy & Resources	 Organization	 Technology Enablers	 Data	 Performance & Application
Responsible, Governable & Contestable Oversight and governance are in place to enforce regulatory and enterprise-wide compliance of AI system development and outcomes.	Strategic Plan Formal documents/artifacts that support a plan for achieving defined AI mission, vision, policies, and standards.	Culture The organizational norms and values support an adaptive and risk-tolerant culture that is ready to accept the types of changes that AI might entail.	AI Innovation Process whereby research, systems engineering, and human-machine design principles and best practices integrate AI into business operations.	Architecture Process of ingesting, storing, organizing, and maintaining the data created and collected by an organization including the lexicon, ontology, security, and privacy standards.	Usage & Adoption Identification and documentation of AI business use cases and the application of integrated solutions and processes into workflows result in realized strategic outcomes
Transparent AI systems decisions, outputs, and outcomes are explainable, justifiable, and transparent to users and those impacted by them.	Partnerships AI partnerships between government, private enterprises, academic institutions, and/or Federally Funded Research and Development Centers (FFRDCs) are available for collaboration.	Organizational Structure AI structures, roles, and processes are defined, documented, and executed within the enterprise.	Test & Evaluation AI-specific T&E standards ensure that solution requirements are verified and validated to meet all identified requirements.	Security & Privacy Protection of privacy rights and data security rights for AI is embedded and upheld by individuals designing, using, and overseeing AI systems to control the safety, specificity, and exchange of personal digital information.	Solution Monitoring A combination of tools and processes that monitor deployed AI solutions to detect any changes in performance, fairness, security, or user trust over time.
Human-Centric, Fair & Equitable AI systems are designed to accommodate human rights, diversity, and well-being through use of deliberate steps to avoid bias and unfair and/or unintended discrimination or inequitable consequences.	AI Governance AI governance structures, standardized processes, policies, and audits are available to promote conformance with the entity's ethics, regulations, and policies.	Workforce Development Processes are in place for diverse AI teams' training, recruitment, and career impact awareness, to develop and reshape an AI organizational workforce.	Platform A defined set of enabling architecture, standards, computer networking, hardware, and software tools are designed to support development, integration, and operation of AI solutions.	AI Data Governance Process of managing AI data performance and compliance to guard against data bias and ensure availability, usability, integrity, privacy, and security of data in AI systems.	Robust & Reliable AI systems are well defined, designed, and tested across the entire lifecycle—including operations—to ensure that they execute in accordance with intended purpose, avoid failures and malfunctions, and meet required quality parameters.
				Accessibility Process of managing AI data performance and compliance to guard against data bias and ensure availability, usability, integrity, privacy, and security of data in AI systems.	User Trust Repeatability, traceability, transparency, and explainability are supported by due diligence processes, standards, and techniques to design, measure, and calibrate AI solutions to promote appropriate levels of trust.

Source: Bleodorn et al., 2022.

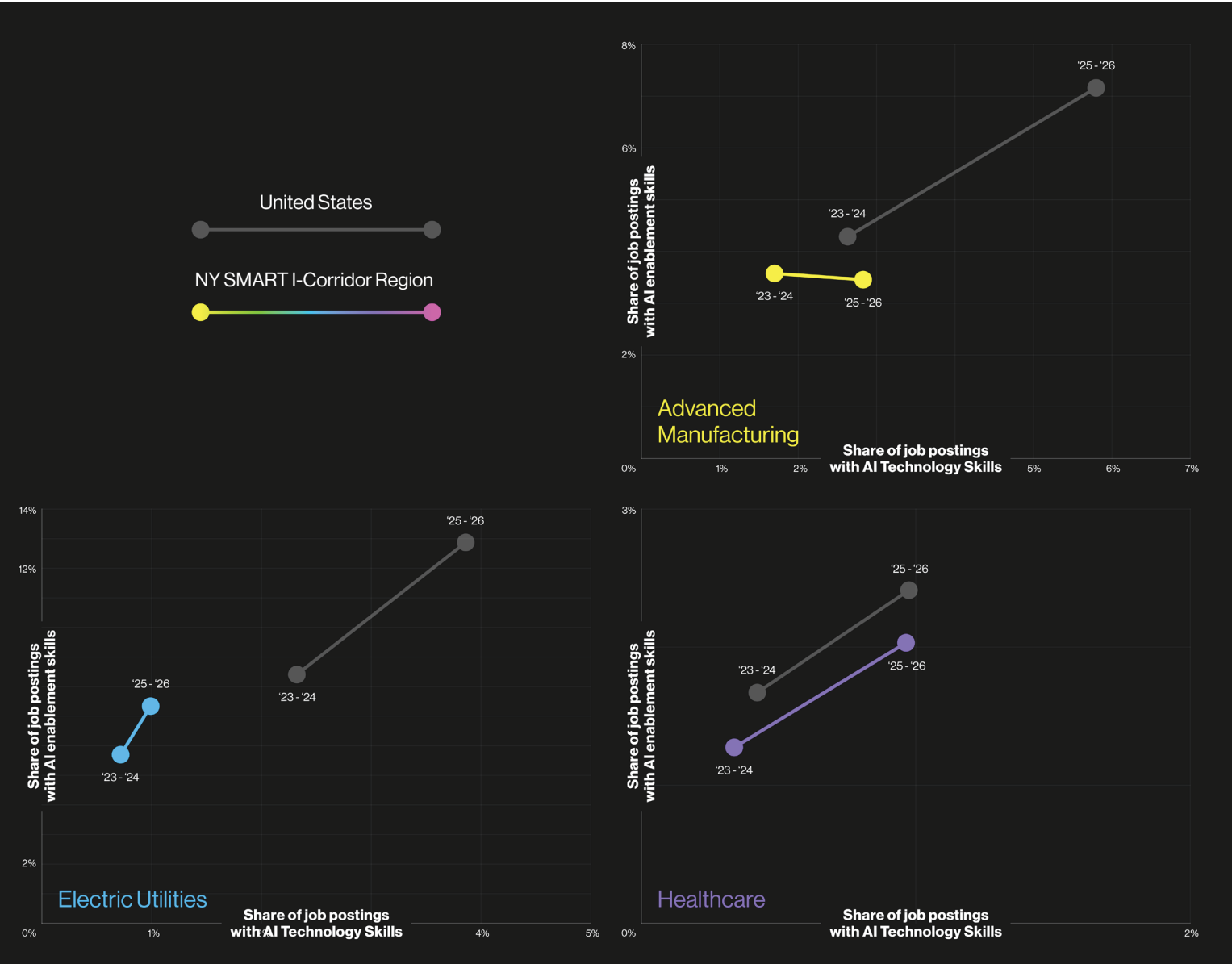
KEY INSIGHT

AI implementation requires more than technology alone. Effective adoption depends on aligned capabilities across strategy, people, data, and governance.

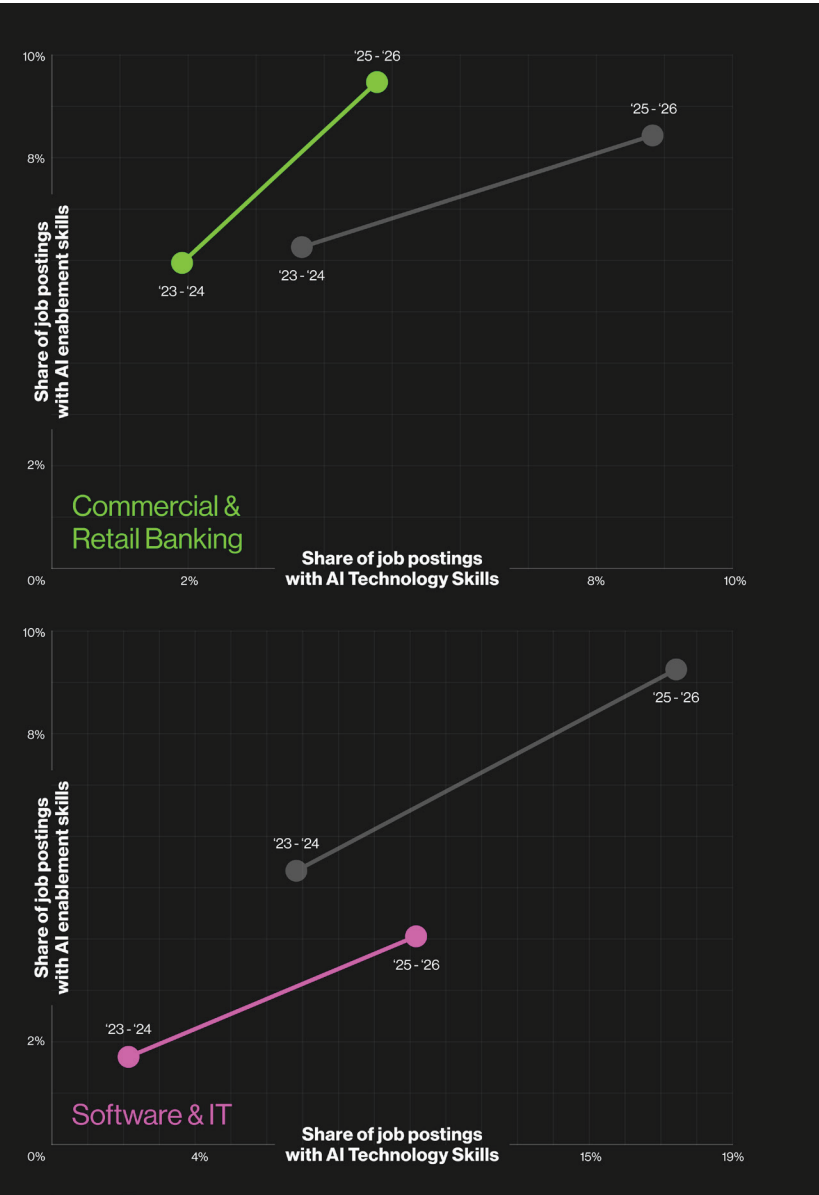
AI Talent Demand Trajectories: Technology vs Enablement

Share of job postings requesting AI technology skills and AI enablement skills by industry | 2023-24 and 2025-26.

AI adoption requires both technical expertise and the organizational capabilities needed to implement AI effectively and responsibly. These graphs compare industries' demand for AI technology skills, such as machine learning and AI software platforms, to demand for AI enablement skills, including governance, ethics, risk management, strategy, and change management. AI enablement skills are based on Lightcast's AI Ethics, Governance, and Regulations skills cluster combined with skills aligned to the pillars of the MITRE AI Maturity Model.



Connecting each industry's hiring mix across two time periods reveals not only current levels of AI hiring, but also the direction of change. With the exception of AI enablement skills for manufacturing in the NY SMART I-Corridor region, all industries show increasing demand for both technology and enablement skills. Software and IT Services exhibits the largest movement toward technical AI hiring, while Commercial and Retail Banking shows strong growth in both dimensions, reflecting simultaneous investment in AI capability and governance. Healthcare and Electric Utilities continue to emphasize enablement skills more heavily than technical AI hiring, suggesting that organizational readiness and compliance may be central priorities. For nearly all measurements, regional demand remains below national levels, but the overall trajectories are similar, indicating that the NY SMART I-Corridor region is generally following national patterns as AI adoption matures.



KEY INSIGHT

Industries are not converging on a single AI workforce model. Instead, they are following distinct trajectories, with some prioritizing technical AI capability and others emphasizing organizational readiness.

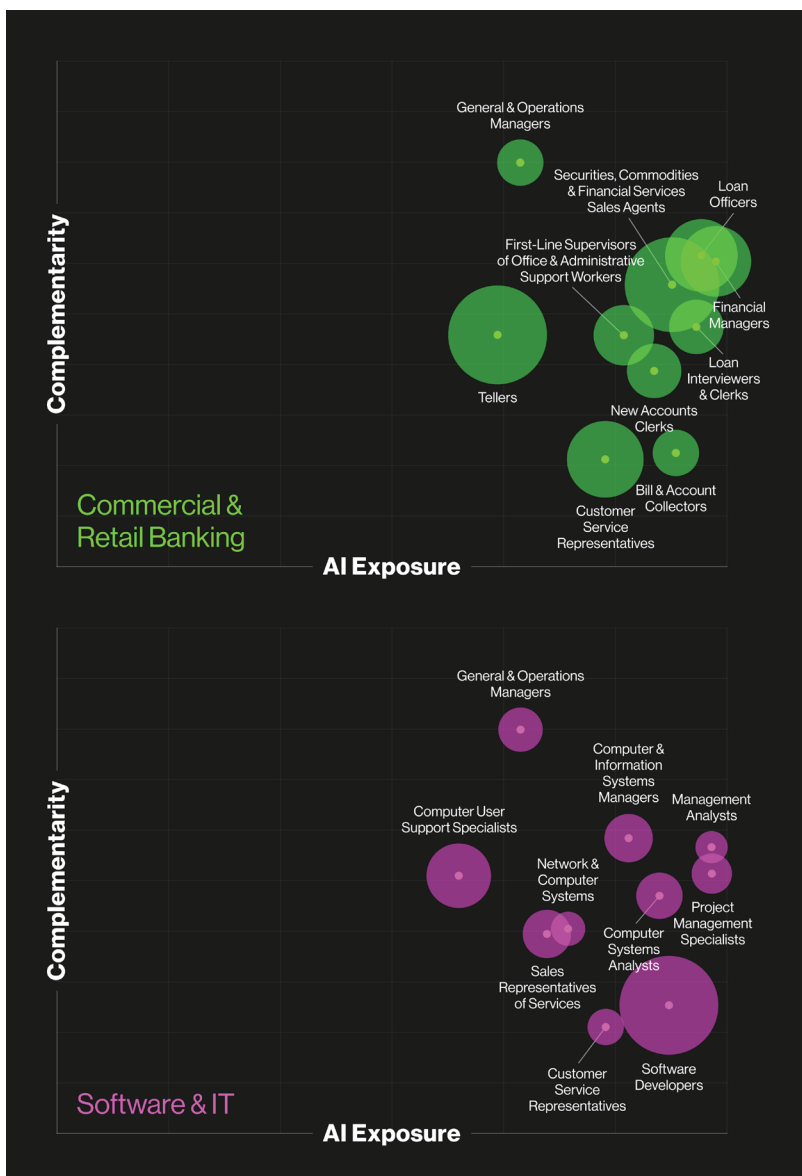
AI Exposure and Complementarity

Measuring automation risk and augmentation potential across the regional workforce.

This analysis compares AI exposure—a measure of vulnerability to AI automation—against AI complementarity, the likelihood that AI will act as a supportive tool rather than a replacement. By considering the most common occupations within an industry in the NY SMART I-Corridor region, distinct narratives emerge. Software and IT Services, together with Commercial and Retail Banking, face high exposure to AI across all the occupations listed. Complementarity varies within both industries, with some occupations facing much higher automation risk than others.



In contrast, Advanced Manufacturing and Electric Utilities employ workers spread out widely along the spectrum of both AI exposure and complementarity, suggesting the need for multifaceted AI adoption strategies within these industries. Healthcare stands out not only for its heavy concentration of workers in nursing, but also for its relatively low overall exposure to AI. Because many healthcare workers rely largely on physical context, human interaction, and high-stakes decision-making, AI is more likely to augment this sector rather than displace its workers. Ultimately, business leaders may choose to tailor their AI adoption and upskilling strategies to the unique occupational footprint of their specific industry.



KEY INSIGHT

Because the impact of AI varies dramatically by occupation, organizations may need to tailor their AI approaches by occupation: investing in upskilling for high-complementarity roles, while simultaneously developing transition or retraining plans for high-exposure, low-complementarity workers.

Source: Felten et al., 2021, and Pizzinelli et al., 2023

Resources for Growth and Workforce Development in Greater Rochester

Programs and funding for modernization, training, hiring, and retention.

Greater Rochester employers can draw on a range of regional and New York State programs to support workforce development, modernization, hiring, training, and retention. These selected resources offer practical starting points for organizations looking to expand their business and prepare for changing workforce needs.

Excelsior Jobs Program

Provided By: Empire State Development

Description: Offers refundable tax credits to offset plant modernization, expansion, R&D, and job creation.

Eligibility Requirements: Strategic industry firms creating net new jobs (5–50 based on sector) or established firms retaining staff while executing major capital investments (10:1 benefit-cost ratio).

Learn More: rit.edu/go/excelsior

Workforce Development Capital Grant Program

Provided By: NYS Office of Strategic Workforce Development

Description: Provides capital grants (\$100k–\$3M covering up to 50% of project costs) for facility expansion, physical modernization, and technical lab equipment.

Eligibility Requirements: Workforce training providers, including non-profits, higher ed, and chambers partnering with employers in OSDW priority sectors who commit to hiring graduates.

Learn More: rit.edu/go/oswd

RIT CIMS Industry 4.0 Transition Assistance Program

Provided By: Center for Integrated Manufacturing Studies (CIMS) at RIT

Description: Offers engineering consulting and on-site assessments to integrate IIoT sensors, automated quality control, and operator training.

Eligibility Requirements: Medium and large manufacturing enterprises in Finger Lakes and Central NY modernizing production lines.

Learn More: rit.edu/go/cims-industry

Greater Rochester Chamber HR Helpline & Benchmarking

Provided By: Greater Rochester Chamber of Commerce

Description: Provides direct access to HR compliance experts, annual compensation/benefits benchmarking surveys, and executive peer forums.

Eligibility Requirements: Membership in Greater Rochester Chamber.

Learn More: rit.edu/go/chamber

RochesterWorks Shift Program

Provided By: RochesterWorks

Description: Provides financial incentives, workforce data, training, and more to help address hiring and retaining qualified employees.

Eligibility Requirements: Employer must be located in Monroe County.

Learn More: rit.edu/go/rochesterworks

Monroe on the Job

Provided By: Monroe County Economic Development

Description: Reimburses eligible training expenses for programs that lead to an industry-recognized certification or transferable credential. Funding is available up to \$4,000 per employee or \$16,000 per company. Employers must contribute at least 50% of the total training cost.

Eligibility Requirements: Companies participating in qualified certification or credential programs. Reimbursement is paid directly to the employer after satisfactory evidence of training completion is provided.

Learn More: rit.edu/go/monroe

New York State Employee Training Incentive Program

Provided By: Empire State Development

Description: Delivers 50% refundable tax credits for skills training (up to \$10,000/employee) or intern stipends (up to \$3,000/intern).

Eligibility Requirements: Businesses in strategic industries executing capital investments; internship track requires <100 employees.

Learn More: rit.edu/go/empire

NYS OSWD Pay for Performance Operating Grants

Provided By: NYS OSWD / ESD

Description: Offers operating grants (\$50k–\$1M covering up to 75% of costs) for workforce curriculum design, instruction, instructional technology, and services to foster job placement and retention.

Eligibility Requirements: Workforce training providers, higher ed, and chambers partnering with local employers.

Learn More: rit.edu/go/operating-grants

RIT Global Cybersecurity Institute Cyber Range and Training Center

Provided By: ESL Global Cybersecurity Institute at RIT

Description: Advanced team training. “with a wide range of training opportunities for your teams and management alike. The Cyber Range can generate the real world feel of responding to a cybersecurity crisis.”

Eligibility Requirements: None.

Learn More: rit.edu/go/cyber-range

RochesterWorks Incumbent Worker Training Grant

Provided By: RochesterWorks

Description: Reimburses up to 90% of direct eligible training costs (capped at \$10,000/year) to upskill existing staff.

Eligibility Requirements: Monroe County private for-profit or non-profit entities; training must be short-term (<6 months) with 30-day advance pre-approval.

Learn More: rit.edu/go/incumbent-worker

RochesterWorks On-the-Job Training Grant

Provided By: RochesterWorks

Description: Reimburses up to 50% of a new hire's gross wage rate during onboarding (capped at \$7,500 / 640 hours per trainee).

Eligibility Requirements: Monroe County employers (>120 days in operation) hiring full-time, year-round roles; maximum of 3 grant awards per year.

Learn More: rit.edu/go/on-the-job

RochesterWorks Work Experience Tryout Program

Provided By: RochesterWorks in partnership with regional staffing agencies

Description: Provides a 100% wage-subsidized trial evaluation period to test prospective candidates on-site.

Eligibility Requirements: Monroe County host employers offering full-time, year-round positions to local candidates.

Learn More: rit.edu/go/tryout

Greater Rochester Chamber Talent Strategy & Sourcing

Provided By: Greater Rochester Chamber of Commerce

Description: Coordinates international talent recruitment (Global), relocation tools (Relocate), and youth pipeline programs (WORK Together ROC).

Eligibility Requirements: Membership in Greater Rochester Chamber.

Learn More: rit.edu/go/talent

Monroe Manufactures Jobs

Provided By: Monroe County Economic Development

Description: Connects graduates of MCC's Applied Technology Center with local manufacturing employers. The program provides a \$1,500 bonus to the employer and a separate \$1,500 bonus to the eligible employee.

Eligibility Requirements: The employer must be a manufacturer headquartered in Monroe County and retain the qualifying employee for one full year following the date of hire.

Learn More: rit.edu/go/mced

Workers

Regional skill requirements and compensation signals

Job titles often remain unchanged even as the daily substance of work undergoes significant transformation. In Greater Rochester, advertised salary data indicates that technical AI skills do not carry a uniform wage premium across all professions; rather, technical fluency is rapidly becoming a baseline expectation in specialized roles, while serving as a differentiator in managerial and cross-functional positions. At the same time, regional data reveals that employers request durable human capabilities—especially communication and leadership—more frequently in postings that require AI expertise than they do across the broader labor market. When paired with cost-of-living adjusted earnings data benchmarked across peer metros, these indicators represent some of the signals that workers are considering as they make decisions about where to invest in their own development and how to position themselves for the next step in their careers.

AI Salary Premiums by Role

How does inclusion of AI skills in job postings affect median advertised salary? Examining select roles in the Greater Rochester region.

This chart compares the median advertised salary for job postings mentioning AI skills with the overall median advertised salary for the same occupation. The selected occupations play important roles across industries with regional significance, including precision manufacturing, electric utilities, commercial and retail banking, healthcare, and professional services. The size of the difference in median salary, or the AI salary premium, varies considerably across occupations. Some management and business-related roles show particularly large differences, while several technical roles show much smaller AI salary premiums. This suggests that AI skills may be important differentiators for managerial roles, while already being part of the standard skill complement for highly technical roles like software developers.



KEY INSIGHT

The impact on salary of AI skills varies widely. For some roles, AI skills can mean a higher salary, while for other roles, AI skills may have little impact on salary--possibly because they have become expected.

How the Manufacturing Engineer Role Is Evolving

NY SMART I-Corridor Region | 2015–2030

To examine how an evolving regional industry can reshape the daily work of employees over time, this analysis spotlights a single linchpin position: the Manufacturing Engineer. The changes highlighted here reflect the progression in the region from primarily commercial electro-mechanical assembly, to greater inclusion of medical devices, defense systems, and now microelectronics and photonics. To demonstrate how workforce demands shift over time, the analysis tracks the position at five-year intervals, initially drawing on historical job posting data (2015–2025) and extending to a speculative 2030 posting. During this time, foundational shop-floor problem solving does not disappear; rather, successive layers of automation, data infrastructure, and regulatory complexity accumulate on top of core engineering responsibilities.

2015

Tactical Generalist

Primary emphasis

Hands-on electro-mechanical production support, troubleshooting, tooling, and documentation.

Technology & tools

SolidWorks or AutoCAD, LabVIEW or Visual Basic/VBA, manual and semi-automated assembly.

Operating environment

Commercial manufacturing under ISO 9001 quality standards.

2020

Process Validation Specialist

Primary emphasis

Process validation, statistical quality control, cleanroom operations, and yield improvement.

Technology & tools

SolidWorks or AutoCAD, Minitab, automated packaging and vision systems.

Operating environment

Medical-device manufacturing under FDA cGMP and ISO 13485 requirements.

About this analysis: The 2015, 2020, and 2025 job postings were synthesized by generative AI based on hundreds of real historical job postings from the NY SMART I-Corridor region. The 2030 posting is a speculative profile informed by regional and macroeconomic trends. Together they provide a non-scientific exploration of Manufacturing Engineering jobs in the region. Please see the companion web page for more information: certified.rit.edu/skills-summit-insights

Source: Lightcast job postings data

WHAT STAYS CONSTANT

Several foundational expectations remain consistent across the profiles over time:

- Shop-floor and production support
- CAD tooling and fixturing
- Documentation and change control
- Continuous improvement
- Structured problem solving

WHAT IS CHANGING

New layers of capability emerge as manufacturing environments grow more complex:

- Greater use of data, management of integrated enterprise software
- Increased automation and digital simulation
- More specialized regulatory requirements
- Stronger integration across engineering, production, and digital systems

2025

High-Precision Defense Engineer

Primary emphasis

High-reliability manufacturing, cycle-time improvement, traceability, and precision production.

Technology & tools

SolidWorks, Creo or Siemens NX, SAP, CNC machining, and GD&T.

Operating environment

Aerospace and defense manufacturing under AS9100 and ITAR requirements.

2030

Cyber-Physical Process Architect

Primary emphasis

Digital process development, simulation, automation integration, and real-time production optimization.

Technology & tools

Digital twins, collaborative robotics, Python, SQL, Power BI, PLM and MES platforms.

Operating environment

ISO Class 5/7 cleanrooms with sub-micron automated machining cells; increasingly complex regulatory requirements.

KEY INSIGHT

Manufacturing Engineering expectations appear to be accumulating over time, with foundational mechanical and problem-solving skills remaining important as data, software, and the demands of securing cyber-physical systems expand.

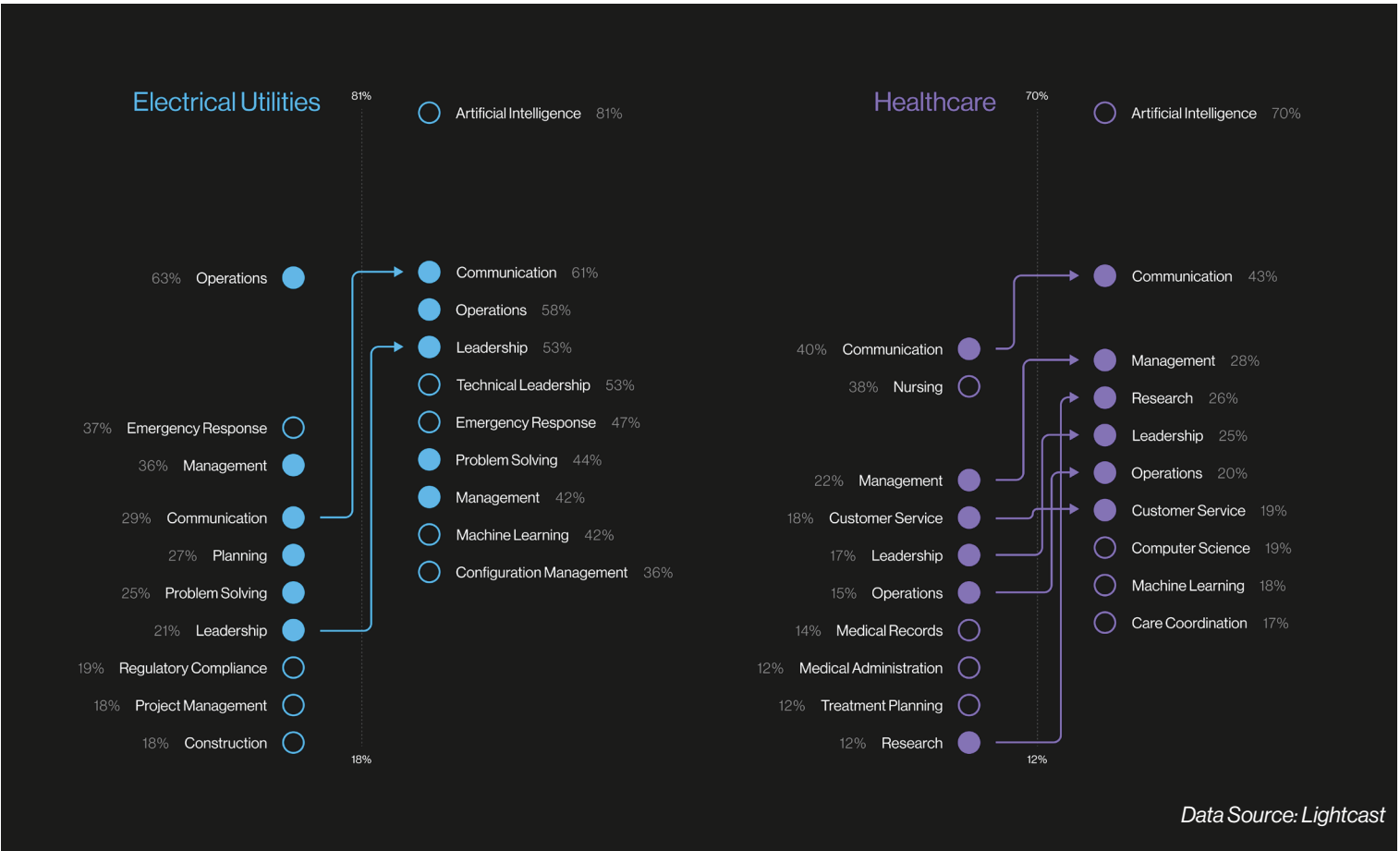
The rising companion skills related to AI

Skills most frequently requested alongside AI skills across industries.

This analysis compares the skill profiles of all job postings within an industry with the skill profiles of postings that specifically request AI-related skills. By examining which skills are more common in AI postings than in postings across the industry as a whole, the analysis identifies each industry's rising companion skills: the durable skills that employers increasingly seek alongside AI expertise. The side-by-side skill rankings show that AI work relies on the same foundational workplace capabilities valued across the labor market, while highlighting the particular importance of communication and leadership.



As artificial intelligence increasingly automates operational tasks, the value of human oversight becomes even more critical. Employers are not merely looking for technical proficiency, but for individuals who can translate AI outputs into actionable business strategies and guide teams through technological transitions. Consequently, fostering strong interpersonal dynamics, strategic decision-making, and continuous adaptability ensures that organizations can effectively maximize the value of modern AI tools.



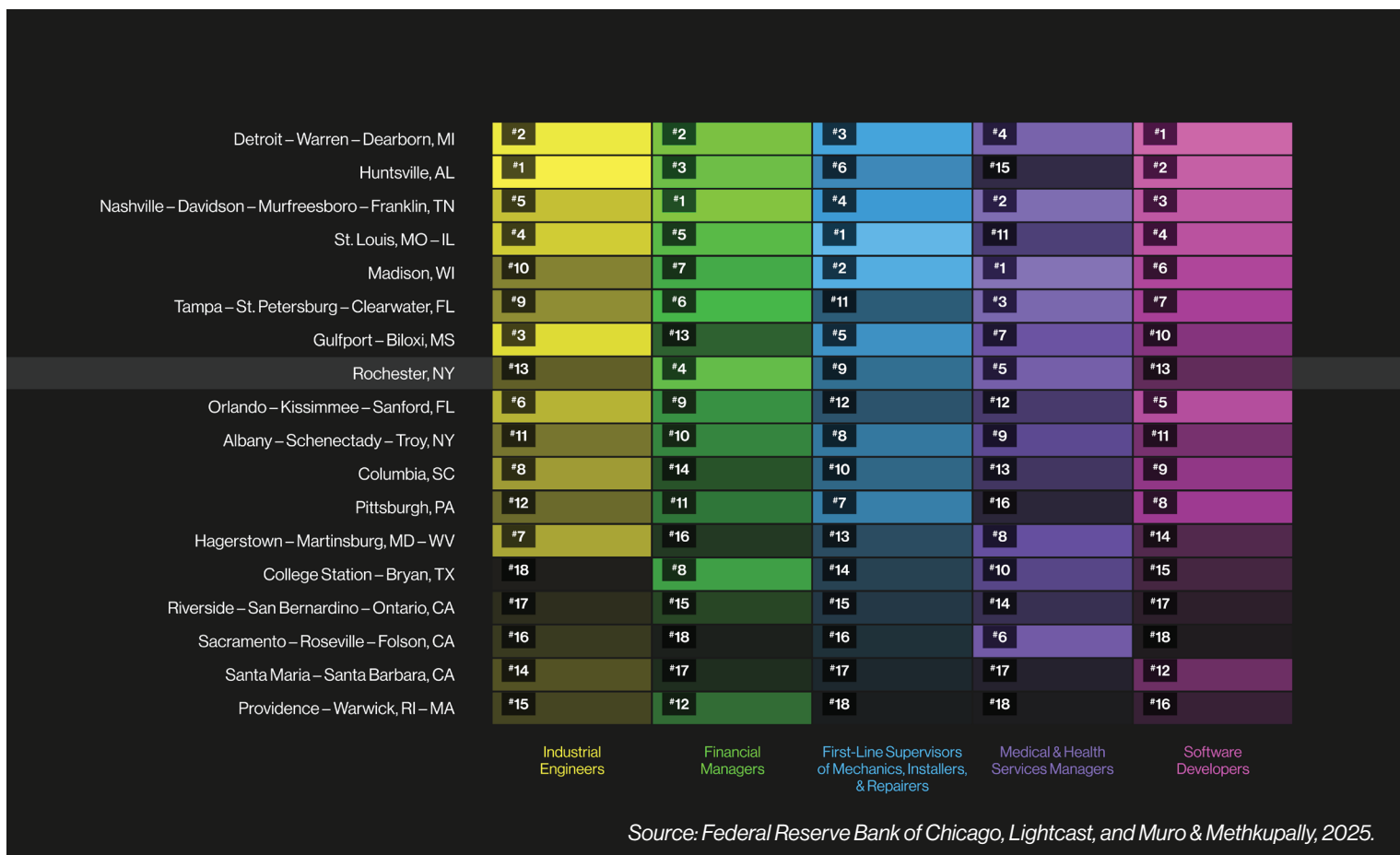
KEY INSIGHT

Communication and leadership emerged as rising companion skills in every industry analyzed, indicating employers' expectation of AI-capable workers to collaborate, influence, and lead effectively.

Adjusted earnings across occupations and peer regions

Ranking cost-of-living adjusted median earnings for 20 peer regions | 2025.

This chart shows cost-of-living adjusted median annual earnings for five selected occupations across 20 regions that share characteristics in common with Greater Rochester. Within a region, different occupations generally share similar ranks, indicating the region's overall cost of living. Entries where an occupation stands within its region—for example, medical and health services managers in Huntsville, AL, and financial managers in College Station-Bryan, TX-- may indicate unusual attributes of the labor market. While the Greater Rochester region lies near the middle of the list, financial managers in the area enjoy especially high earnings relative to the region's cost of living.



KEY INSIGHT

For industrial engineers and software developers, where Rochester ranks 13th among this peer group, employers may need to look beyond regional affordability alone to consider development and advancement opportunities, flexibility, and other aspects to help strengthen a job offer.



Healthier tomorrow's start today.

Better health doesn't happen all at once. It happens with the right support along the way. Excellus BlueCross BlueShield is here to make staying on track for a healthy tomorrow a little easier every day.

ExcellusBCBS.com/ContactUs



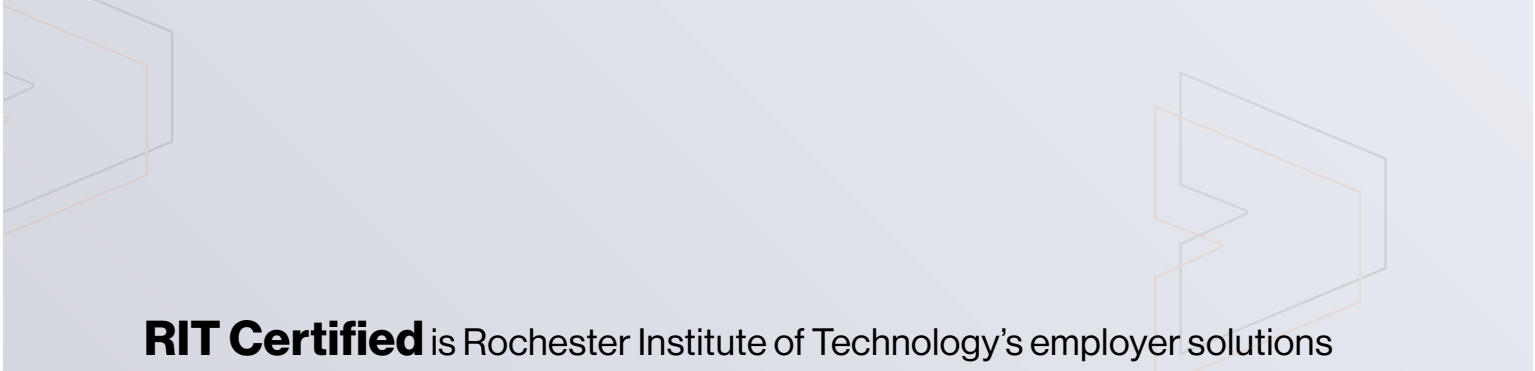
Visit



Call



Click

Abstract geometric shapes in the top corners, consisting of overlapping lines forming a stylized 'R' shape in orange and grey.

RIT Certified is Rochester Institute of Technology's employer solutions engine, extending RIT's applied expertise beyond traditional degree pathways and into the evolving world of work.

We partner with employers to translate that expertise into practical workforce solutions that strengthen capability, performance, and readiness for change. Our work may include professional training, advisory support, customized learning, AI-enabled workflow integration, and tools and practices that help new capabilities take hold.

By connecting RIT's knowledge with real employer needs, RIT Certified helps organizations build skills that can be applied now while preparing people and teams for what comes next.

Abstract geometric shapes in the bottom corners, consisting of overlapping lines forming a stylized 'R' shape in orange and grey.

RIT | **Certified**

certified.rit.edu