



Most Significant IT Roles You Should Consider

To maximize your career potential, now and in the future

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What You Need to Know

As a dedicated IT professional, you think about certification to improve your skills and knowledge, to increase your salary, or to be ready for the next great opportunity.

To identify the best opportunities for IT professionals, IDC recently completed a global survey of IT hiring managers, examined nearly 2 million IT job postings for requested skills, and built a global IT employment model to identify both near- and long-term growth potential for every major role in IT.

That research suggests you may want to consider preparing for 20 specific IT roles, those we call “the most significant IT roles.”

Trends associated with digital transformation are driving the demand for these specific IT roles. For many of these roles, there are skill shortages, but IT hiring managers won't wait. They will fill those positions with the best skilled IT professionals they can find. To be ready for these roles, IT professionals should drive their own careers by getting certified in areas organizations are looking for.

WHAT'S IN THIS INFOBRIEF

- Digital transformation drives skill needs.
- Top 20 Most Significant IT Roles.
- The importance IT hiring managers place on certifications.
- The Cisco certifications most commonly required.

Digital Transformation Is Driving Your Career

These trends are impacting demand for skills across all types of IT roles.

TOP 10 TECHNOLOGY TRENDS IMPACTING HIRING

These trends are increasing demand for skills across all types of IT roles.

- Cybersecurity/Data Security
- Cloud Solutions/Technologies
- Data Analysis/Visualization
- Big Data
- Internet of Things (IoT)
- Business Intelligence
- Artificial Intelligence
- Machine Learning
- Virtualization/Software Defined Infrastructure
- Converged Infrastructure

RESPONSE

In response to these trends, IT leaders and IT professionals must act.



IT leaders will hire for key digital transformation skills.

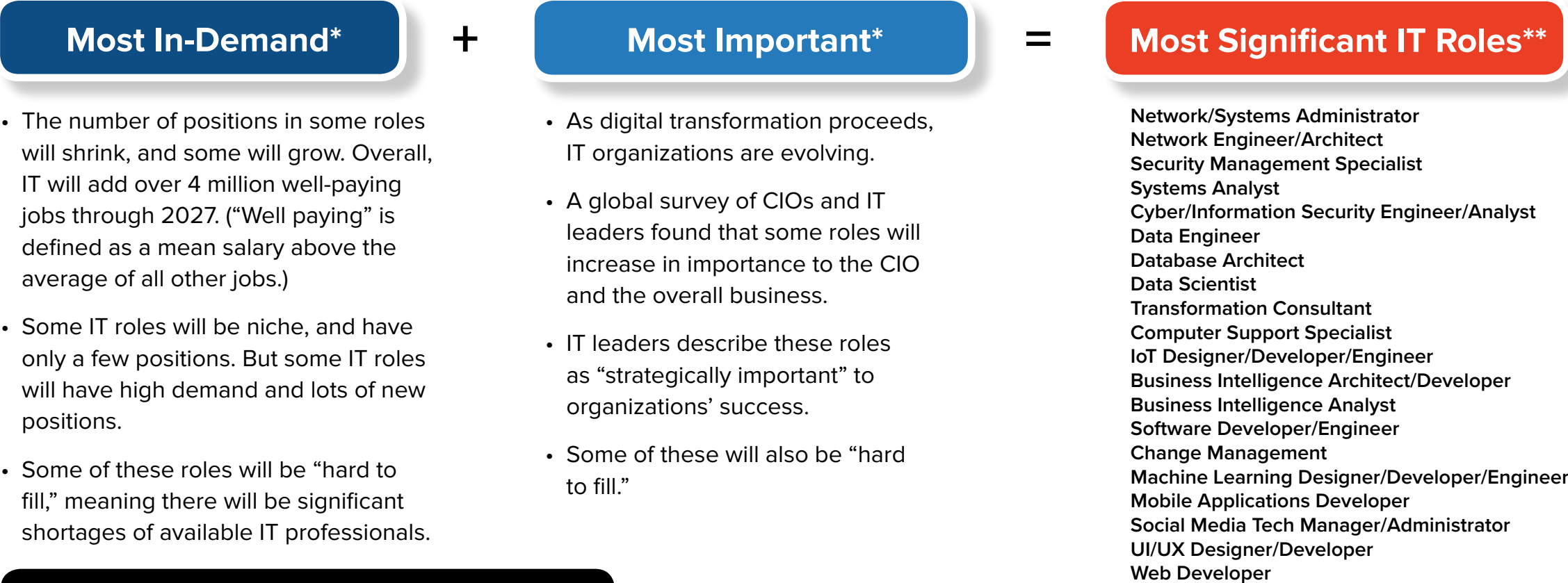


IT pros should prepare for the jobs of the future by considering these trends.

IT Provides Diverse and Growing Opportunity

Some roles are “high demand”... And some are “important to the future of IT.”

With this knowledge, you can drive your long-term career in the IT industry.



Click to view growth, importance and “hard to fill” characteristics of these roles by region

“Most Significant Roles” Span IT Functions

No matter your current role, or your interest, these “most significant” IT roles can be part of your career in IT.



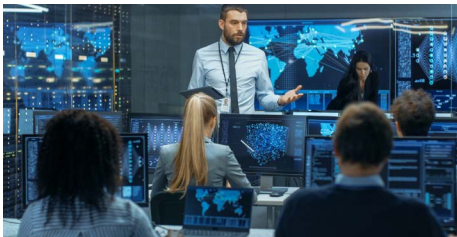
Data Management/ Analytics

- BI Analyst
- BI Architect/Developer
- Data Engineer
- Data Scientist
- Database Architect



Cyber Security

- Cyber/Information Security Engineer
- Security Specialist



IT Infrastructure

- Network Engineer/Architect
- Network/Systems Admin
- Systems Analyst
- Social Media Manager/Admin
- Computer Support Specialist



Software/ Applications Development

- Machine Learning Designer/Developer/Engineer
- Mobile App Developer
- SW Developer/Engineer
- UI/UX Designer/Developer
- Web Developer



Digital Transformation

- Change Management
- IoT Designer/ Engineer
- Transformation Consultant

These Most Significant Roles Have Both Short- and Long-Term Growth—and Align with Digital Transformation Trends

Short term

- » IT organizations are looking for folks to fill these roles right now.
- » In 2017, there were about 2.9m positions in the US and there were 1.9m job postings from employers for these roles.

Long term

- » These roles are the future of IT.
- » These 20 roles will add more than 5m positions (36% increase) worldwide by 2027.
- » And, will add more than a million positions (39% increase) in the US alone by 2027.

REGIONAL GROWTH IN “MOST SIGNIFICANT ROLES” FROM 2017 TO 2027

- Asia Pacific will gain 2.9m positions (36%).
- Latin America will gain 0.6m positions (45%).
- North America will gain 1.2m positions (38%).
- Western Europe will gain 0.5m positions (32%).

[Click to view growth, importance and “hard to fill” characteristics of roles by region](#)

Some Roles Are Difficult for IT Organizations to Fill...

Depending on where you live, some IT organizations are desperate to fill certain IT roles. If you qualify for these jobs, there’s a lot of opportunity for you—maybe even in your own organization.

Worldwide, these are the roles CIOs report are the most difficult to fill:



[Click to view growth, importance and “hard to fill” characteristics of roles by region](#)

... So Companies Develop Skills They Need within Their Organizations

Even if companies have difficulty finding candidates to fill roles, they often proceed with the project or objective anyway. They look inside their organization to fill vacant positions and send IT professionals to training to “grow from within.”

Companies don't delay a project if they can't fill a position.

- When organizations can't find external candidates, they identify motivated internal candidates.

When developing candidates, many organizations leverage vendor certification programs to ensure rigorous expectations, best practices, and up-to-date product knowledge.

ORGANIZATIONS' LONG-TERM TALENT ACQUISITION STRATEGY

#1 Strategy: “Grow from within” is the most frequently used approach globally.

CIOs Leverage Certification Because Certified Candidates Are More Capable

7 out of 10 organizations leverage IT certifications when hiring or promoting.

FACTS:

IT Leaders

70% believe certifications are an indicator of applicants' qualifications.

Hiring Managers

71% believe certifications increase confidence that candidate has skills/knowledge.

DX Executives

82% believe certifications accelerate innovation and new ways to support business.

IT Customers

71% believe certifications improve level of service and support to end users.

Your Opportunity to Step Up Your Game

Cisco skills are among the most included skills in hiring requirements. They are included more frequently than **97% of all skills requested.**

Top IT Skills for Professional Success—Frequently requested skills:



Get the IT Certifications Employers Want to Hire



71% of hiring managers say relevant certifications increase their confidence in an applicant’s knowledge, skills, and abilities.

Cisco Certifications are ranked among the most requested certifications in

1.9M IT-RELATED OPENINGS
in the past 12 months.

Most frequently requested Cisco Certifications:

- CCNA Cisco Certified Network Associate
- CCNP Cisco Certified Network Professional
- CCIE Cisco Certified Internetwork Expert
- CCDP Cisco Certified Design Professional
- CCNP Collaboration
- CCNP Security

What's Next? The Road to Success!

1. Select your next opportunity—ask yourself:

- How is your enterprise incorporating new technologies?
- What does your enterprise's IT roadmap look like?
- What parts of your IT organization are growing?
- Where do you want to work?

2. How do you pay for it?

- IT professionals report most of their training is paid for by their employer.
- Organizations typically spend development dollars on “hard to fill” positions.
- What positions are hard to fill in your organization?
- You might want to pay for it yourself: 22% of IT professionals report they “self-funded” some high-value training in the past 12 months.

3. Upskill yourself

- About 50% of IT professionals took some IT training in 2017.
- Make the time: Only 4% of IT professionals said they didn't have time for training.
- IT professionals don't show strong preference between classroom training and elearning.

4. Pass the test

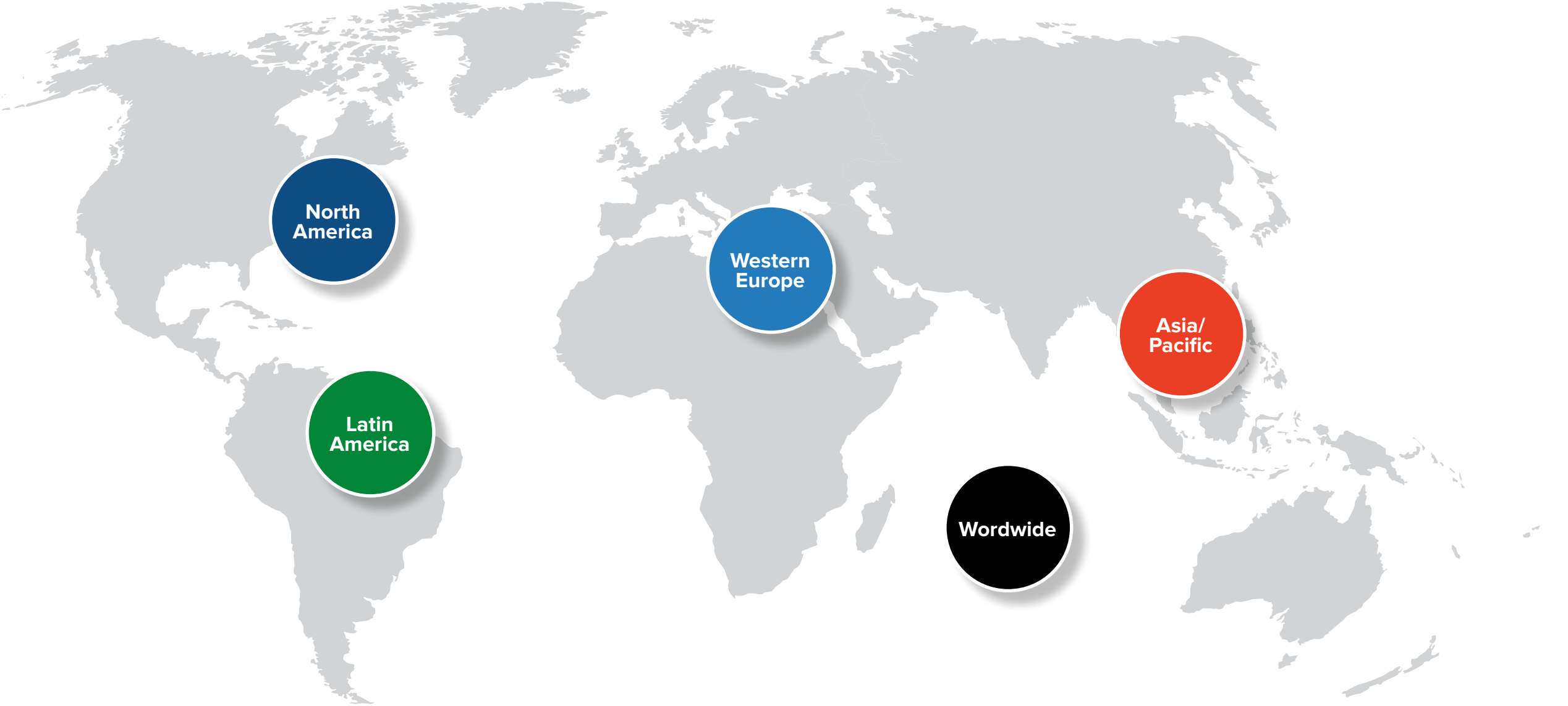
- About 15% of all IT professionals took some form training that might lead to certification in 2017.
- Getting certified this year demonstrates your commitment to your profession and puts you ahead of 85% of your peers.

5. Get a great job!

- Certified professionals are considered more competent and more desirable.
- Certification makes you a trusted professional, with a stable career, and increased job security.

Hot Jobs Index

Future Growth for In-Demand Roles by Region



Hot Jobs Index

Overview for Most Significant Roles Worldwide

	Future Importance	Hiring difficulty	Long-term growth
Security Management Specialist	Very high	Not difficult	High
Network Engineer/Architect	High	Not difficult	Low
Cyber/Information Security Engineer/Analyst	High	Not difficult	High
IoT Designer/Developer/Engineer	High	Not difficult	High
Business Intelligence Architect/Developer	High	Difficult	High
Software Developer/Engineer	High	Not difficult	Moderate
Machine Learning Designer/Developer/Engineer	High	Not difficult	Very high
Data Engineer	Medium	Difficult	High
Transformation Consultant	Medium	Not difficult	Moderate
Business Intelligence Analyst	Medium	Not difficult	High
Change Management	Medium	Not difficult	High
Mobile Applications Developer	Medium	Difficult	Moderate
Web Developer	Medium	Difficult	Moderate
Network/Systems Administrator	Low	Very difficult	Low
Systems Analyst	Low	Difficult	Low
Database Architect	Low	Difficult	Low
Data Scientist	Low	Not difficult	High
Computer Support Specialist	Low	Not difficult	Low
Social Media Tech Manager/Administrator	Very low	Very difficult	Moderate
UI/UX Designer/Developer	Very low	Not difficult	Low

Hot Jobs Index

Overview for Most Significant Roles in North America

	Future Importance	Hiring difficulty	Long-term growth
Security Management Specialist	Very high	Not difficult	High
Cyber/Information Security Engineer/Analyst	High	Not difficult	High
IoT Designer/Developer/Engineer	High	Not difficult	High
Software Developer/Engineer	High	Not difficult	Moderate
Machine Learning Designer/Developer/Engineer	High	Not difficult	Very high
Mobile Applications Developer	High	Not difficult	Moderate
Network/Systems Administrator	Medium	Difficult	Low
Data Engineer	Medium	Difficult	High
Business Intelligence Architect/Developer	Medium	Difficult	High
Business Intelligence Analyst	Medium	Not difficult	High
Change Management	Medium	Very difficult	High
Web Developer	Medium	Very difficult	Moderate
Network Engineer/Architect	Low	Not difficult	Low
Systems Analyst	Low	Not difficult	Low
Database Architect	Low	Very difficult	Low
Transformation Consultant	Low	Difficult	Moderate
Computer Support Specialist	Low	Difficult	Low
Data Scientist	Very low	Not difficult	High
Social Media Tech Manager/Administrator	Very low	Very difficult	Moderate
UI/UX Designer/Developer	Very low	Not difficult	Low

Hot Jobs Index

Overview for Most Significant Roles in Latin America

	Future Importance	Hiring difficulty	Long-term growth
Cyber/Information Security Engineer/Analyst	Very high	Not difficult	High
Security Management Specialist	High	Not difficult	High
IoT Designer/Developer/Engineer	High	Not difficult	High
Machine Learning Designer/Developer/Engineer	High	Not difficult	Very high
Mobile Applications Developer	High	Not difficult	High
Network/Systems Administrator	Medium	Very difficult	Low
Data Scientist	Medium	Not difficult	High
Transformation Consultant	Medium	Very difficult	High
Software Developer/Engineer	Medium	Not difficult	Moderate
UI/UX Designer/Developer	Medium	Not difficult	Moderate
Web Developer	Medium	Difficult	Moderate
Network Engineer/Architect	Low	Not difficult	Low
Systems Analyst	Low	Very difficult	Low
Data Engineer	Low	Very difficult	Very high
Business Intelligence Architect/Developer	Low	Not difficult	High
Change Management	Low	Difficult	High
Database Architect	Very low	Difficult	Low
Computer Support Specialist	Very low	Difficult	Low
Business Intelligence Analyst	Very low	Difficult	High
Social Media Tech Manager/Administrator	Very low	Difficult	Moderate

Hot Jobs Index

Overview for Most Significant Roles in Western Europe

	Future Importance	Hiring difficulty	Long-term growth
Security Management Specialist	Very high	Not difficult	High
Network Engineer/Architect	High	Not difficult	Low
Systems Analyst	High	Difficult	Low
Cyber/Information Security Engineer/Analyst	High	Not difficult	High
Business Intelligence Analyst	High	Not difficult	Moderate
Machine Learning Designer/Developer/Engineer	High	Not difficult	High
Mobile Applications Developer	High	Difficult	Moderate
Network/Systems Administrator	Medium	Difficult	Low
Database Architect	Medium	Difficult	Low
Transformation Consultant	Medium	Not difficult	Moderate
Computer Support Specialist	Medium	Very difficult	Very low
Software Developer/Engineer	Medium	Difficult	Low
Data Engineer	Low	Difficult	High
IoT Designer/Developer/Engineer	Low	Not difficult	Moderate
UI/UX Designer/Developer	Low	Not difficult	Low
Web Developer	Low	Not difficult	Low
Data Scientist	Very low	Not difficult	High
Business Intelligence Architect/Developer	Very low	Not difficult	High
Change Management	Very low	Not difficult	Moderate
Social Media Tech Manager/Administrator	Very low	Very difficult	Moderate

Hot Jobs Index

Overview for Most Significant Roles in Asia/Pacific

	Future Importance	Hiring difficulty	Long-term growth
Cyber/Information Security Engineer/Analyst	Very high	Not difficult	High
Security Management Specialist	High	Not difficult	High
IoT Designer/Developer/Engineer	High	Not difficult	Moderate
Business Intelligence Architect/Developer	High	Difficult	High
Change Management	High	Not difficult	High
Machine Learning Designer/Developer/Engineer	High	Not difficult	High
Network Engineer/Architect	Medium	Not difficult	Low
Data Engineer	Medium	Difficult	High
Transformation Consultant	Medium	Not difficult	Moderate
Computer Support Specialist	Medium	Not difficult	Very low
Business Intelligence Analyst	Medium	Not difficult	High
Software Developer/Engineer	Medium	Difficult	Moderate
Web Developer	Medium	Difficult	Low
Network/Systems Administrator	Low	Very difficult	Low
Systems Analyst	Low	Difficult	Low
Database Architect	Low	Not difficult	Low
Data Scientist	Low	Not difficult	High
Mobile Applications Developer	Low	Very difficult	Moderate
Social Media Tech Manager/Administrator	Very low	Very difficult	Moderate
UI/UX Designer/Developer	Very low	Difficult	Low