

THE HIDDEN TALENT GUIDE

Find and Train Skilled
Pros for AI, Cloud &
Cybersecurity

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Introduction

The cloud computing, AI, and cybersecurity talent shortage isn't going away. If you're only hiring based on traditional job titles, you're already behind. The best way to scale your team is by hiring high-potential candidates from adjacent roles and upskilling them. This guide provides specific examples of adjacent roles that can transition into high-demand tech positions and how to bridge the gap with on-the-job training.

Cybersecurity: Hiring for Defensive & Threat Detection Skills

Cybersecurity professionals don't have to come from traditional IT security backgrounds. Some of the best security analysts come from industries that deal with fraud, risk analysis, and anomaly detection.

Fraud Prevention & Risk Analysts (Banking & Financial Services) → Cybersecurity Analysts

- **Why?** These professionals are trained to spot patterns of fraud, detect anomalies, and understand risk assessment frameworks, all of which are critical skills in cybersecurity.
- **How to bridge the gap?** Train them in network security, threat intelligence, and incident response.

Military Veterans (Signals Intelligence, Cyber Ops, Information Security) → SOC Analysts / Threat Intelligence Specialists

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Retail Loss Prevention / Fraud Detection → Insider Threat Analysts

- **Why?** These professionals specialize in behavioral analysis and investigating security risks, similar to insider threat detection in cybersecurity.
- **How to bridge the gap?** Training in SIEM tools, cybersecurity frameworks, and digital forensics.

System Administrators → Security Engineers

- **Why?** Many system admins already have experience managing networks, implementing access controls, and monitoring system health, all of which are core cybersecurity functions.
- **How to bridge the gap?** Upskill in firewall management, intrusion detection, and cloud security best practices.

Entry-Level Cybersecurity Hiring Opportunities

- **Entry-Level SOC Analysts:** Can be recruited from IT support or help desk roles.
- **Threat Intelligence Researchers:** Candidates from criminal justice, intelligence analysis, or behavioral science can transition into cyber threat intelligence roles.

Cloud Computing: Hiring for Infrastructure, Systems, and Automation Skills

Cloud roles often require experience in multi-cloud environments, automation, and infrastructure-as-code—but that doesn't mean you have to hire experienced cloud engineers.

System Administrators → Cloud Engineers / Cloud Administrators

- **Why?** Sysadmins already manage virtualized environments, networking, and infrastructure, which are highly transferable to cloud computing.
- **How to bridge the gap?** Train in AWS, Azure, Google Cloud, focusing on IAM, automation, and Kubernetes.

DevOps Engineers → Cloud Security Engineers

- **Why?** DevOps professionals have experience with CI/CD pipelines, Infrastructure as code (IaC), and automation, which are essential for cloud security.
- **How to bridge the gap?** Provide security training on IAM policies, compliance frameworks, and cloud security tools.

Database Administrators (DBA) → Cloud Database Engineers

- **Why?** DBAs understand data storage, performance tuning, and database security, which translates well into cloud-based database management.
- **How to bridge the gap?** Train in AWS RDS, Azure SQL, and Google Cloud Spanner.

Electrical Engineers → Cloud Infrastructure Engineers

- **Why?** Electrical engineers with experience in hardware, power systems, and data center management can transition into cloud infrastructure and data center operations.
- **How to bridge the gap?** Provide training on networking, virtualization, and cloud service providers.

Entry-Level Cloud Hiring Opportunities

- **Junior Cloud Administrators:** Can be recruited from IT support roles, sysadmin, or tech-savvy talent with IT certifications, and IT community college courses or IT experience from military service.
- **Cloud Support Associates:** Hire candidates from technical customer support or IT help desks, then train in cloud environments.

AI & Data Science: Hiring for Analytical & Machine Learning Skills

AI and data science roles are often thought of as requiring PhDs or advanced degrees, but companies can hire from adjacent analytical roles and upskill them in AI applications.

Business Analysts → Data Analysts / AI Engineers

- **Why?** Business analysts already work with large datasets, SQL, and visualization tools.
- **How to bridge the gap?** Train in Python, machine learning, and AI modeling.

Software Engineers → AI/ML Engineers

- **Why?** Developers familiar with Python, Java, and data structures can transition into AI engineering.
- **How to bridge the gap?** Train in TensorFlow, PyTorch, and model deployment.

Actuaries / Financial Analysts → AI Risk & Ethics Analysts

- **Why?** Actuaries and risk analysts understand predictive modeling, statistics, and regulatory compliance, which aligns well with AI risk and bias detection.
- **How to bridge the gap?** Provide training in AI ethics frameworks, algorithmic fairness, and responsible AI development.

Entry-Level AI Hiring Opportunities

- **Data Annotators:** Can be recruited from general administrative or research assistant roles.
- **Junior AI Engineers:** Can transition from data analysts or junior developers with training in machine learning frameworks.

How to Make the Shift: A Hiring & Training Framework

To successfully transition candidates from adjacent roles, companies must take a structured approach to skills mapping and upskilling.

1 Identify the Core Competencies Required for the Role

Instead of focusing on job titles, break down the essential skills needed for cybersecurity, cloud computing, and AI roles.

For example, a cybersecurity analyst might need:

- Pattern recognition & anomaly detection
- Incident response & risk analysis
- Security frameworks (NIST, ISO 27001)
- SIEM tool experience (Splunk, Sentinel)

Rather than requiring previous security experience, look for professionals with experience in fraud detection, IT support, or system administration who already possess some of these skills.

2 Implement Training Programs to Fill Skill Gaps

Companies must proactively invest in structured training programs to convert adjacent talent into fully capable professionals.

Effective approaches include:

- Internal certification & training programs (e.g., AWS Academy, Google Cloud Training)
- Apprenticeship models & internships for nontraditional candidates
- On-the-job mentorship programs pairing new hires with experienced professionals
- Online learning platforms (Coursera, Udemy, LinkedIn Learning) for scalable, self-paced upskilling

3 Build Internal Career Pathways

Don't just hire for skills—develop a system where employees can grow into more advanced roles. For example:

- Cloud Support Associate → Cloud Administrator → Cloud Security Engineer
- IT Help Desk → Cybersecurity Analyst → Threat Intelligence Specialist
- Business Analyst → Data Engineer → AI/ML Engineer



Final Takeaway: Expand Your Talent Pipeline & Scale Faster

Hiring for adjacent skills isn't just a nice-to-have—it's an essential strategy for closing the talent gap in cloud computing, cybersecurity, and AI. Companies that proactively identify transferable skills and invest in upskilling will future proof their workforce and gain a competitive advantage in the ever-changing tech landscape.

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About Us

YUPRO Placement is founded on the belief that talent is universal, but opportunity is not. We're, therefore, on a mission to connect organizations like yours with our nationwide talent community of 180k+ driven, skilled jobseekers from historically overlooked communities.

Whether you require temporary skilled professionals to meet increased demand or to help deliver a project or need to nurture a pipeline of professionals equipped with sought-after skills, we can find you the talent you need through our suite of staffing solutions.