EDUARDO NOYOLA

How To Become a **Cloud Engineer** in **2026**

A Beginner's Guide
Learn what skills matter, what to ignore, and how to approach cloud engineering in 2026

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WHY CLOUD MATTERS IN 2026

The title “Cloud Engineer” has become a broad term that covers a wide range of responsibilities, tools, and specializations. Today, we can find cloud-related work in a diversification of roles such as DevOps Engineer, Site Reliability Engineer (SRE), Cloud Architect and among others. While these positions share common foundations, each focuses on different problems, from automation and reliability to large-scale system design.

Over the last few years, cloud engineers have been in consistently high demand, and that demand continues to grow in 2026. Nearly every industry now depends on cloud infrastructure in some form, including finance, healthcare, retail, government institutions, and technology companies. Cloud platforms have become the backbone of modern businesses, supporting critical systems that must be secure, scalable, and highly available. As a result, organizations are constantly looking for professionals who can build, operate, and improve these environments.

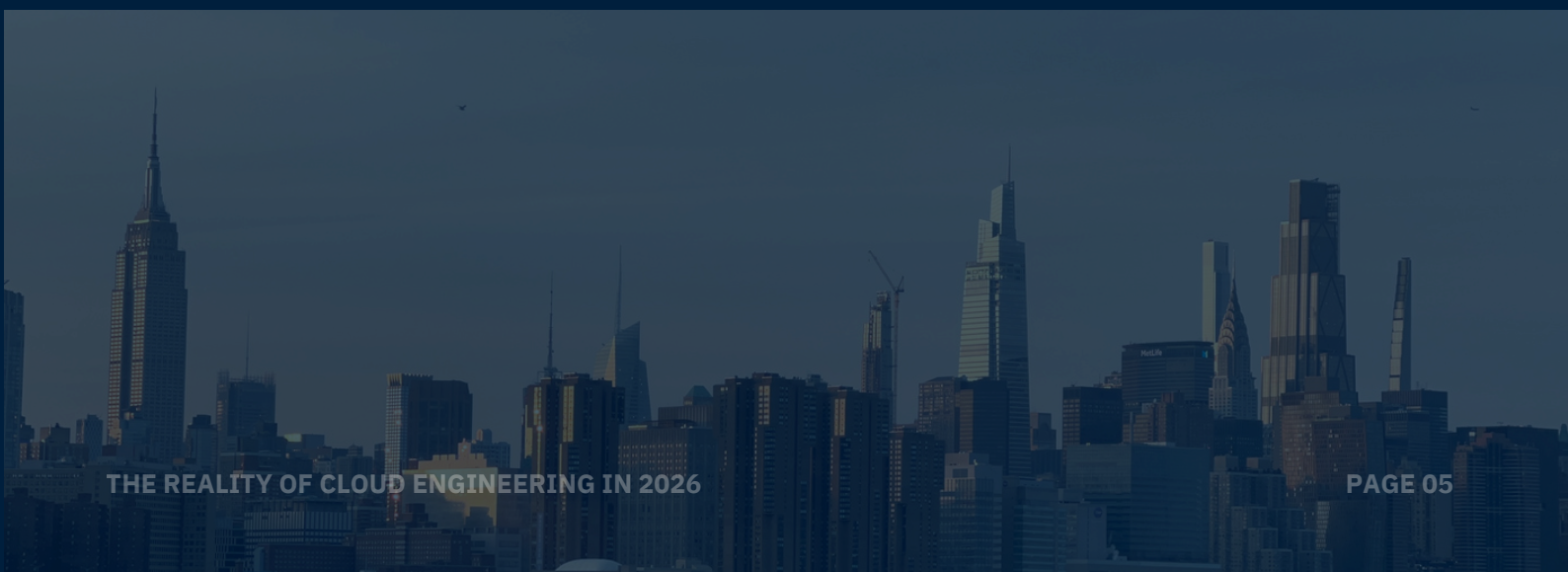
Despite the large number of job opportunities, companies continue to report difficulty finding qualified cloud professionals. As of January 2026, there are more than 100k cloud-related job openings listed on LinkedIn in the United States alone. Employers are not only looking for surface-level knowledge, but also for people who understand networking, security, automation, AI, architect scalable systems and drive innovation in the cloud.

Cloud adoption is still accelerating. Many organizations are in the middle of migrating their workloads, while others are only beginning their cloud journey. According to Goldman Sachs Research, the global cloud computing market is expected to reach approximately USD 2 trillion by 2030. This continued growth means that cloud engineers will remain essential for years to come, maintaining existing systems, modernizing legacy infrastructure, and enabling innovation across industries

> **I have seen people from non-related technical roles successfully transitioning into Cloud Engineering**

There is no single path into cloud roles, I have seen people from helpdesk and IT support, networking roles, banking and finance, and even non-technical careers successfully transition into cloud engineering fields. What they had in common is the willingness to learn fundamentals, practice consistently, and adapt to new technologies.

Cloud engineering today offers strong job security and flexibility, but it is not a shortcut career. It requires continuous learning, problem-solving, and a solid understanding of how systems work beyond the cloud console. For those who are willing to invest the time and effort, cloud engineering in 2026 remains one of the most resilient and impactful technical career paths available.



2 The **Skills** That Actually **Matter**

The **Skills** That Actually **Matter**

LINUX

The majority of cloud workloads run on Linux-based systems. Understanding how to navigate the file system, manage processes, inspect logs, and troubleshoot basic issues is critical. You do not need to be a Linux expert from day one, but you must be comfortable working with the terminal.

NETWORKING

Networking is not negotiable. Nearly every cloud architecture and deployment depends on networking and many production issues are rooted in misconfigurations at this level. You must understand the fundamentals such as IP ranges, subnet, routing, VPN, BGP, DNS, Firewall rules. Without these fundamentals, it becomes very difficult to design, secure, or debug cloud environments effectively.

Cloud engineering is built on fundamentals, tools change, principles do not

Most cloud problems are not “cloud problems” they are Linux and networking problems.

CLOUD

Trying to learn multiple cloud providers at the same time often leads to shallow knowledge and confusion. It is far more effective to choose one provider such as AWS or Azure and learn it deeply. Once you understand the core concepts, moving to another cloud becomes much easier.

After working with multiple platforms such as Microsoft Azure, AWS, Google Cloud, IBM Cloud, and Oracle Cloud, it becomes clear that while interfaces and service names differ, the underlying concepts remain the same. A virtual network in Azure follows the same principles as a VPC in AWS.

The **Skills** That Actually **Matter**

INFRASTRUCTURE AS CODE

While learning to deploy and manage resources through the cloud console is important at the beginning, real-world environments rely heavily on automation. Infrastructure as Code allows you to define, deploy, and manage infrastructure consistently and at scale. Several tools exist for this purpose, but Terraform has become the industry standard and is widely used across cloud providers.

AUTOMATION

You do not need to be a software engineer, but you must be comfortable using Git and writing scripts in Python, Bash, or another programming language to automate tasks, integrate systems, and support infrastructure workflows. Understanding how CI/CD pipelines work, combined with version control, is what enables repeatability, consistency, and collaboration in modern cloud teams.

CONTAINER ORCHESTRATION

Container orchestration has become a core component of modern cloud architectures. Kubernetes, in particular, has established itself as the standard platform for running and managing containerized workloads. You do not need to master Kubernetes immediately, but understanding its core concepts and how managed services like EKS, AKS, or GKE work provides a strong advantage in cloud native environments.

EXTRAS

Finally, but no less important, it is essential for cloud engineers to understand the concepts of security and cost optimization. Knowing how to design and manage secure architectures, as well as control cloud spending, is just as important as the skills mentioned above. These areas are a fundamental part of building responsible, efficient, and sustainable cloud solutions.

AI IS YOUR ALLY, NOT YOUR ENEMY

3

Cloud Engineers in the **AI** Era

Cloud Engineers in the AI Era

Artificial intelligence is not the enemy of cloud engineers, nor is it a direct replacement. In reality, AI has become one of the most powerful tools available to engineers. The real risk is not AI itself, but choosing not to learn how to use it. In 2026, a cloud engineer who understands how to work with AI can often execute tasks 2x, 3x or 4x times faster than someone who does not, making AI adoption a competitive advantage rather than a threat.

AI related skills are increasingly becoming an expected part of technical roles. This does not mean that a cloud engineer must become a machine learning expert, but it does mean understanding how AI fits into daily workflows. Engineers who know how to leverage AI for troubleshooting, automation, documentation, and can make better decisions are significantly more effective and productive in real-world environments.

At a conceptual level, it is important to understand concepts such as prompt engineering, retrieval augmented generation (RAG), and fine tuning.

These concepts help engineers understand how AI systems behave, how they interact with data, and how they can be adapted to solve real business problems.

Additionally, large language models (LLM) and other AI services ultimately relies on cloud infrastructure and is the foundation that makes AI systems possible at scale, which means cloud engineers play a critical role in enabling, securing, and optimizing these systems.

In the AI era, cloud engineers who embrace AI rather than fear it will remain highly relevant. The future belongs to who combine strong infrastructure fundamentals with the ability to work alongside intelligent systems, using them to deliver better, faster, and more resilient solutions.

> **AI will not replace cloud engineers, cloud engineers who can use AI will replace those who don't.**

CERTIFICATIONS VALIDATE
KNOWLEDGE BUT THEY DON'T
REPLACE EXPERIENCE

4 Certifications

Certifications

Certifications have become a standard part of the cloud industry, and in 2026 they continue to play an important role. For many companies, certifications are a way to validate baseline knowledge, filter candidates, and meet internal or partner requirements. However, certifications alone do not make someone a cloud engineer, and understanding their real value is essential.

WHAT HELPS

For beginners, certifications can serve as a structured learning path. After choosing a cloud provider, certifications such as Microsoft Azure Administrator or AWS Solutions Architect Associate provide a solid introduction to core cloud concepts, services, and best practices. When combined with hands-on practice, they can support the transition into cloud roles.

It is important to understand what certifications do and do not represent. Certifications can open doors, help your resume get noticed, and demonstrate commitment to learning. However, they do not replace hands-on experience, problem solving skills, or the ability to troubleshoot real environments.

Learn the fundamentals, build projects, gain practical exposure, and then use certifications to reinforce and validate what you already know. When certifications are aligned with experience, they become a powerful tool rather than an empty credential.

PROJECTS TURN KNOWLEDGE INTO EVIDENCE

5 Projects That Matter

Projects That **Matter**

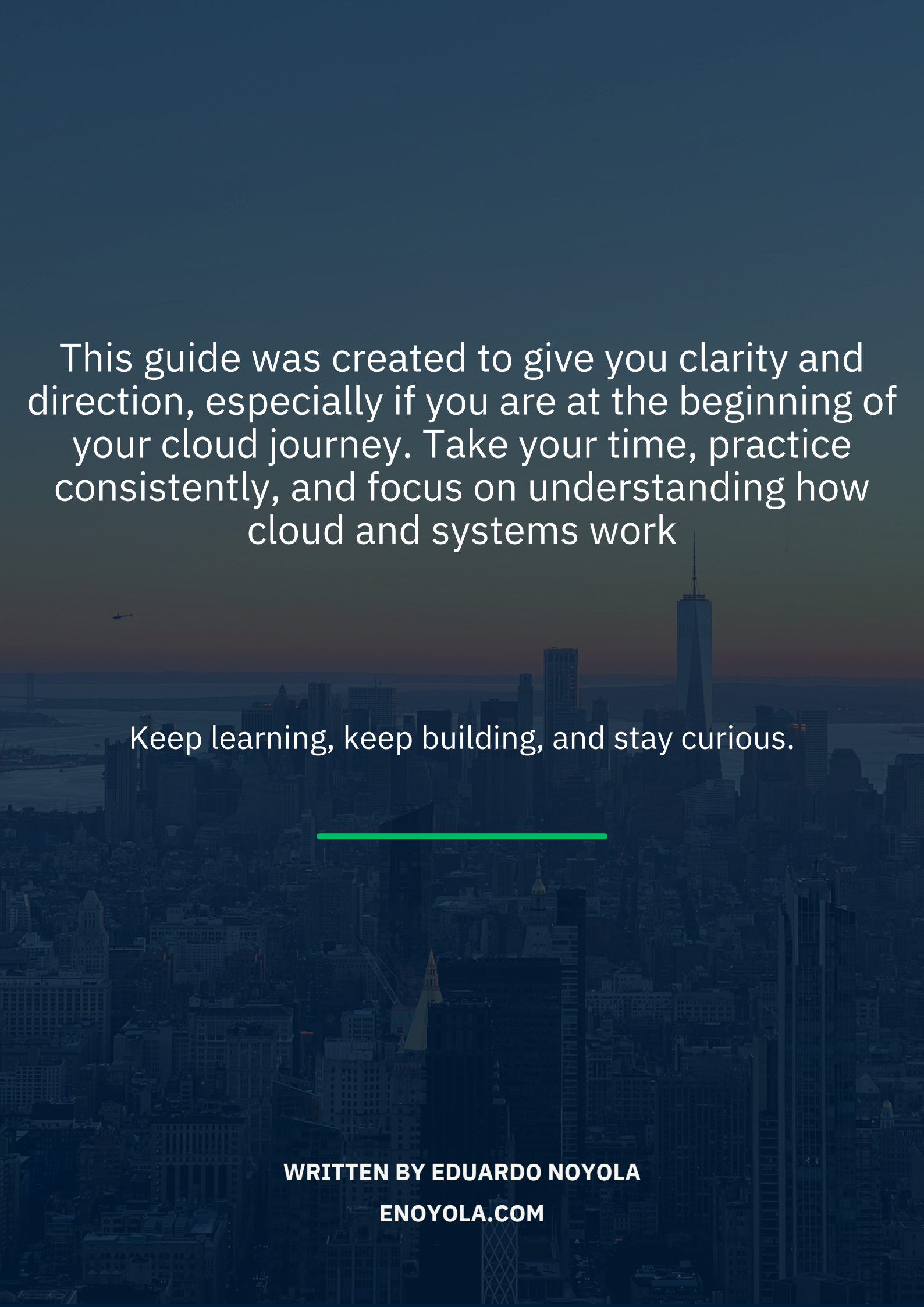
WHAT HIRING MANAGERS WANT TO SEE

Certifications alone do not get you hired, you need proof. As I mentioned in the previous section, while certifications can help open doors and get your résumé noticed, projects combined with clear explanations are what actually lead to job offers. Hiring managers want to see evidence that you can apply your knowledge, make decisions, and understand how services work beyond theory.

A common mistake is building projects that are too simple or disconnected from real world scenarios. Deploying a single virtual machine, virtual network or following a step by step tutorial rarely demonstrates meaningful skills. Instead, focus on building complete architectures where multiple services work together. This allows you to experience real challenges related to networking, security, automation, monitoring, and cost management.

Projects that matter are those where you can explain the why behind your decisions. Why you chose a specific architecture, how you secured it, how it scales, and how you would improve it over time. Documenting your projects through diagrams, repositories, or short explanations can help you to understand what you have done and get more job offers.

Projects are where theory becomes experience. They bridge the gap between learning and real work, and they are one of the most effective ways to prove that you are capable for a cloud engineering role.



This guide was created to give you clarity and direction, especially if you are at the beginning of your cloud journey. Take your time, practice consistently, and focus on understanding how cloud and systems work

Keep learning, keep building, and stay curious.

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