

AI Security Architect

Five capability areas, and how to be understood by an executive

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The role sits where two talent shortages collide: people who can design a whole security programme, and people who can design an enterprise AI system that produces business value. **Architecture is a decision-quality job, not a tool-knowledge job.**

THE FIVE CAPABILITY AREAS – RATE YOURSELF

AI architecture Use cases, data models, model selection, agents, model lifecycle, evaluation and monitoring. As a strategist and decision maker, not as a coder. 1 2 3 4 5

Security architecture Threat modelling, data protection, cloud and application security, zero trust, governance, incident response, risk management. At design level, not tool-operator level. 1 2 3 4 5

Business acumen Revenue against cost against risk, business operations, customer experience, compliance exposure, executive priorities. This is where most candidates fail. 1 2 3 4 5

Executive communication Explaining complex AI security risk in plain language. No jargon, no tool dumping – the decision, the risk, the trade-offs, the business impact. 1 2 3 4 5

Leadership and governance Aligning security, cloud, data, legal, compliance and finance, plus executives and vendors. AI without governance is just risk at computer speed. 1 2 3 4 5

1 = no real exposure · 3 = I contribute · 5 = I own the decision and can defend it to a board. Your lowest score is your next move, not your strongest one.

ENGINEER OR ARCHITECT?

The engineer asks	The architect asks
Which model, which API, which interface?	What data will the system access, and who approves that access?
Can we build it?	Should we build it – and what could go wrong?
How do we ship it?	How do we authenticate users, authorise access and log what actually happened?
Does the output look right?	How do we validate outputs so a hallucination does not become financial advice?
Is the model fast enough?	Is the data regulated, can the model retain prompts, can it leak?

WHY THE DEMAND IS REAL

63% of employers name skill gaps as the main barrier to transformation (World Economic Forum).

11% of technology executives feel prepared to deploy AI agents at scale, while 77% say adoption is outpacing their governance (IBM).

70% of CIOs found AI running on their systems that nobody had told them about. Shadow AI is real.

AI Security Architect

Translate the risk, or the architecture never gets funded

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SAY THIS, NOT THAT

Technical risk	What the business needs to hear
Prompt injection	Business process compromise
Data leakage	Regulatory and reputational risk
Shadow AI	Uncontrolled enterprise exposure
Model isolation, prompt filtering, token-level monitoring	Controls that keep confidential customer data out of the wrong hands
Insufficient audit logging	We cannot prove what happened if a regulator asks

SAME SUBSTANCE, OPPOSITE OUTCOME

NEVER GETS FUNDED

“We need to implement better model isolation, prompt filtering, and token-level monitoring.”

GETS FUNDED

“If we deploy this AI system without proper governance, confidential customer data could be exposed, regulators could get involved, and our reputation could be harmed. Here is a safer approach that still lets us move quickly.”

QUESTIONS TO BRING TO ANY AI INITIATIVE

Access What data will the system reach, and who signs off on that access?

Retention Is the data regulated? Can the model retain previous prompts?

Accountability How do we authenticate, authorise and log – well enough to reconstruct an incident?

Validation How do we check outputs before they reach a customer or a decision?

Justification Should we build this at all – and if so, this way or another way?

Certifications alone will not get you there. They prove exposure to a body of knowledge; the role is judged on the quality of the decisions you make and your ability to defend them to people who do not share your vocabulary.

SOURCES

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