

The Future Is Up to Developers: Impact on the Front Lines of Responsible AI



generationAI
CONFERENCE

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CNIT Forest Paris



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AI Ethicist



The Evolving Role of Developers in the AI Era

Where are we now?

#1

reason **developers**
still consult
humans — distrust
in AI [1]

20%

gains in
efficiency in API
development
and creation [2]

1.1M+

public repos
on GitHub
use LLM
SDKs [3]

66%

of developers
frustrated by "AI
solutions that are
almost right, but not
quite" [1]

1. Deloitte. *Rewriting Product and Engineering Roles in the Age of AI*. Deloitte, June 2025. <https://www.deloitte.com/content/dam/assets-zone3/us/en/docs/industries/technology-media-telecommunications/2025/deloitte-rewriting-product-and-engineering-roles-in-the-age-of-ai.pdf>
2. Stack Overflow. *AI | 2025 Stack Overflow Developer Survey*. Stack Overflow, 2025. <https://survey.stackoverflow.co/2025/ai>
3. GitHub Staff. "Octoverse: A New Developer Joins GitHub Every Second as AI Leads TypeScript to #1." *GitHub Blog*, 28 Oct. 2025, updated 30 Oct. 2025. <https://github.blog/news-insights/octoverse/octoverse-a-new-developer-joins-github-every-second-as-ai-leads-typescript-to-1/>

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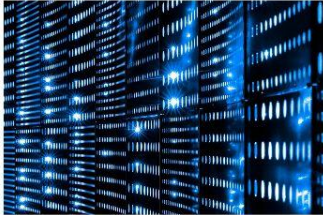
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Where are we headed?

AI systems as
the foundation
of **critical**
infrastructure



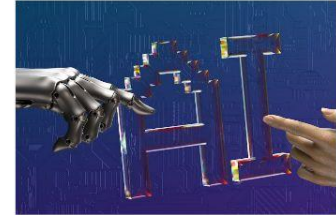
A de-facto **AI**
Tech Stack
across
industries



Proliferation
of risks
across the
SDLC



Big bets and
big
opportunities



What's at stake?

SDLC and the AI Tech Stack

Facebook-era,
"move fast
and break
things" SDLC

Greater risks
== greater
responsibility

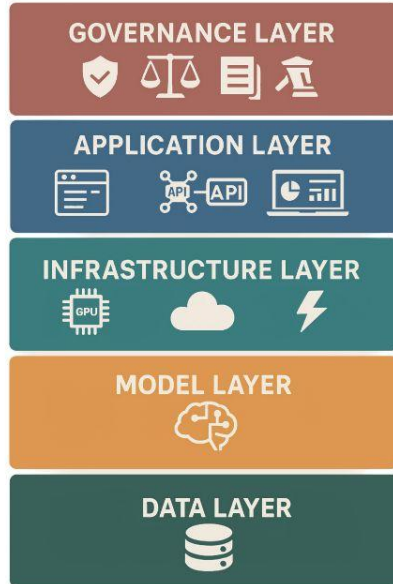
Should we
reform the
de facto
SDLC?



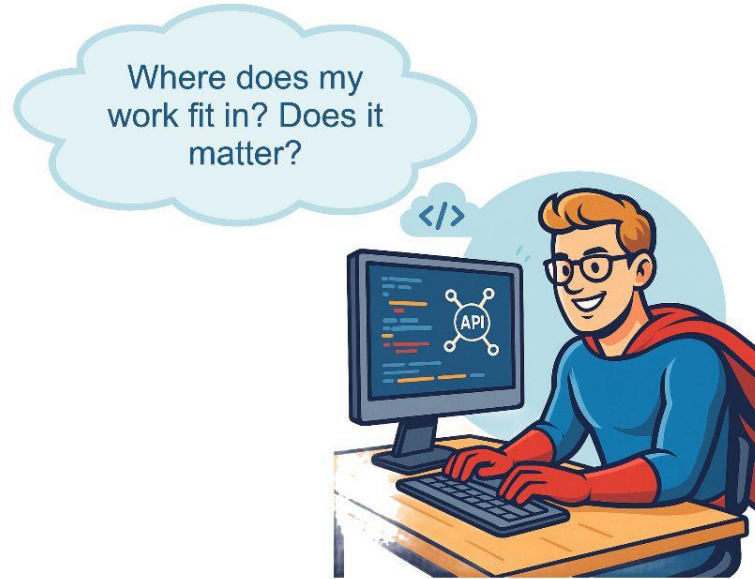
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The AI Tech Stack and API Development

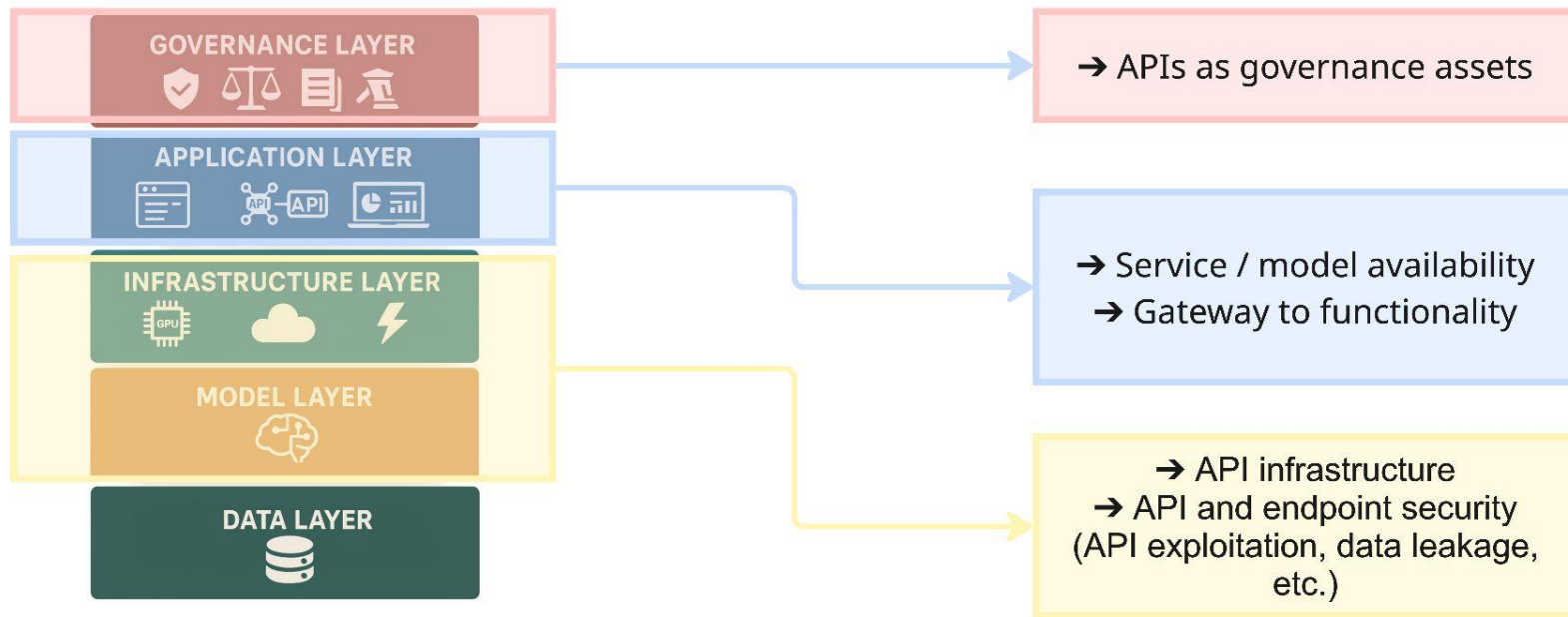


Paladin Global Institute. *AI Tech Stack: A Primer for Tech and Cyber Policy*. Paladin Capital Group, June 2025



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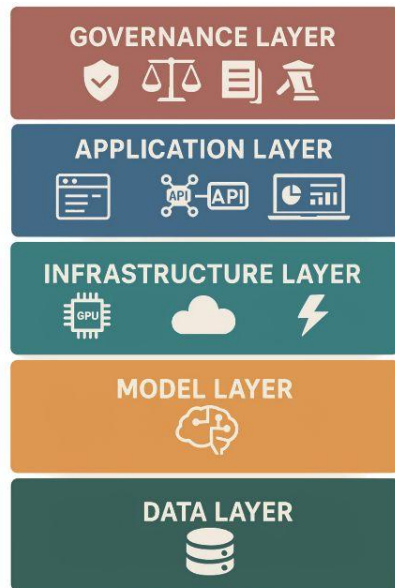
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Practical Ethics for Developers

4 steps to foster responsible AI

1	2	3	4
Know the AI Tech Stack	Foresee and analyze risk	Avoid Detachment	Communicate effectively

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Envision your role in each layer

Scenario: Designing a public API endpoint for a platform, which will ultimately be consumed by an LLM

- Does your design fulfill basic security best practices?
- Is it optimized for LLMs and AI-related traffic?
- Your vulnerabilities become the stack's vulnerabilities
- Small inconsistencies in your endpoints or payloads will be amplified



AI-generated content

1	2	3	4
Know the AI Tech Stack	Foresee / analyze risk	Avoid Detachment	Communicate effectively

Foresee and analyze potential risks

Scenario: You're designing an API endpoint that will be used to populate a data pool for a 3rd party LLM

- Your API will shape an external model's behavior during training
- Your API will be an additional entry point for vulnerabilities in an upstream AI stack
- High-risk incidents, injection threats (e.g., Hugging Face)



 Bank Info Security

Hugging Face Vulnerabilities Highlight AI-as-a-Service Risks

Security researchers have discovered two critical vulnerabilities in the Hugging Face AI platform that exposed potential gaps for attackers...

Apr 8, 2024

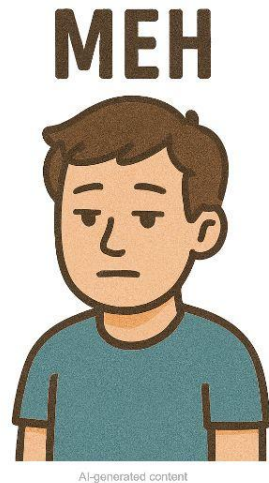


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Avoid detachment between your day to day and the bigger picture

- Be aware of optimism bias
- Consider the future implications of how your work might be used
- Challenge the status quo

“The calculations are made in the algorithms, so it doesn’t really make mistakes.” - Anonymous engineer, ("This is Just a Prototype, 2020 Study) [1] **”**



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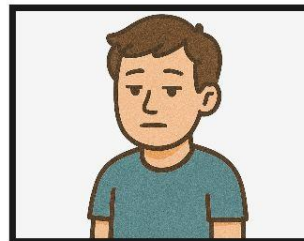
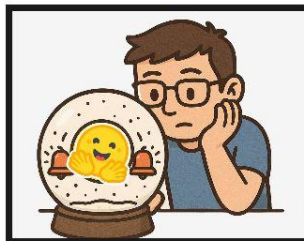
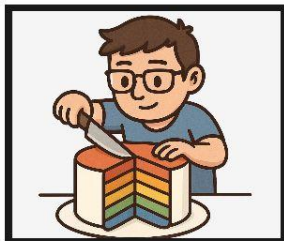
Communicate effectively in a common language

- Build sustainable relationships with trusted stakeholders
- Tailor your communications to your audience and remember we're all riding this wave together
- Choose your battles



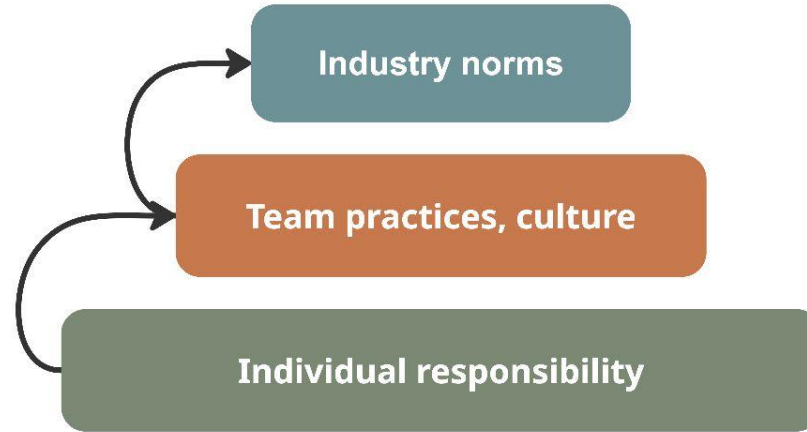
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Advancing Responsible AI Together

Developer choices today shape tomorrow's governance layer



TL;DR: AI governance takes collective action from the bottom up



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Collective action as a developer community is one of our best tools for ensuring responsible AI

Governance happens at every layer of the tech stack

Responsible engineering is **intentional**

Thank you

