

16:00–16:15 | Keynote – Building Tomorrow's AI-Ready Workforce



TYLER MENEZES

CEO



There's a global talent shortage.

4.8M

**Cybersecurity
Professionals**

4.2M

**AI
Developers**

2.1M

**Network
Engineers**

Marie Laure Esi Alorvor, Natasa Perucica, Sean Doyle, Tal Goldstein, and Akshay Joshi. 2024. *Strategic Cybersecurity Talent Framework*. World Economic Forum. <https://www.weforum.org/publications/strategic-cybersecurity-talent-framework/>.
The State of AI in Early 2024. 2024. McKinsey & Company. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-2024>.



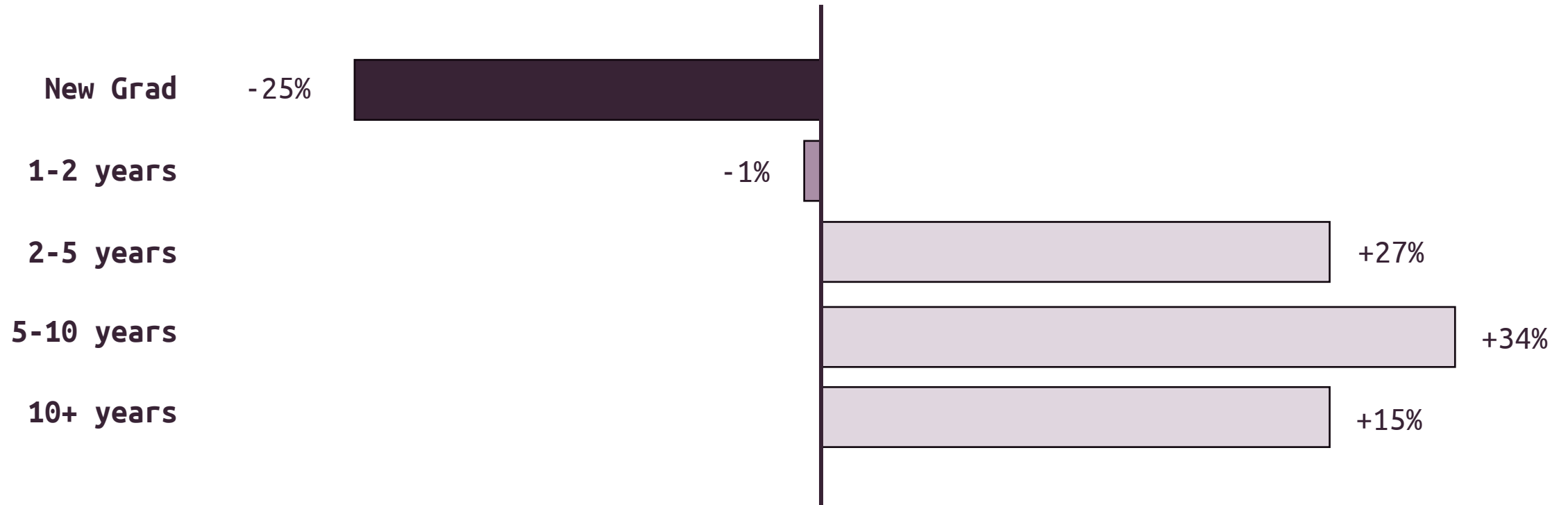
Goodbye, \$165,000 Tech Jobs. Student Coders Seek Work at Chipotle.

As companies like Amazon and Microsoft lay off workers and embrace A.I. coding tools, computer science graduates say they're struggling to land tech jobs.



Natasha Singer. 2025. "Goodbye, \$165,000 Tech Jobs. Student Coders Seek Work at Chipotle." Technology. *The New York Times*, August 10. <https://www.nytimes.com/2025/08/10/technology/coding-ai-jobs-students.html>.

The paradox: new grads can't get jobs.



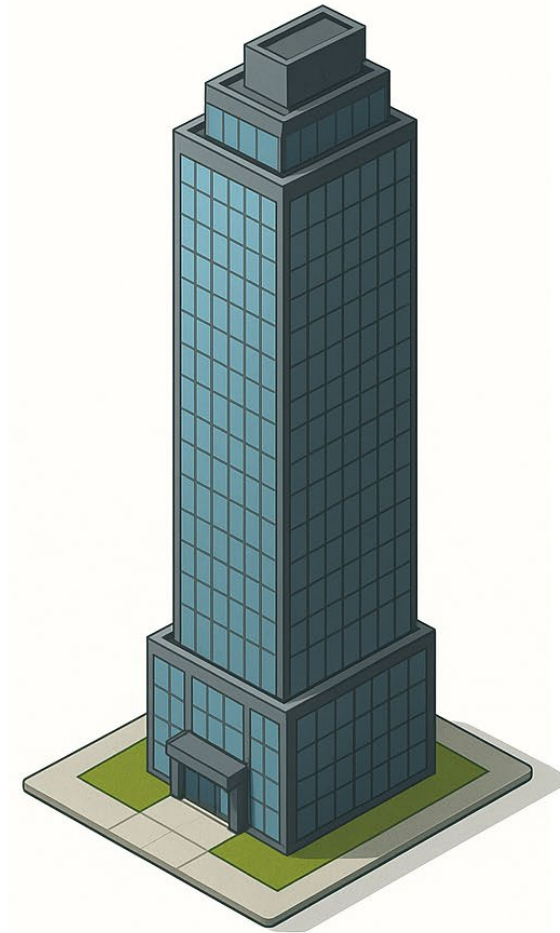
Big Tech Hiring by Years of Experience, Change Since 2019

Rya Jetha and Ezra Wallach. 2025. "Welcome to Silicon Valley's Entry-Level Job Recession." *The San Francisco Standard*, May 20.
<https://sfstandard.com/2025/05/20/silicon-valley-white-collar-recession-entry-level/>.

**Undergraduate
Programs**

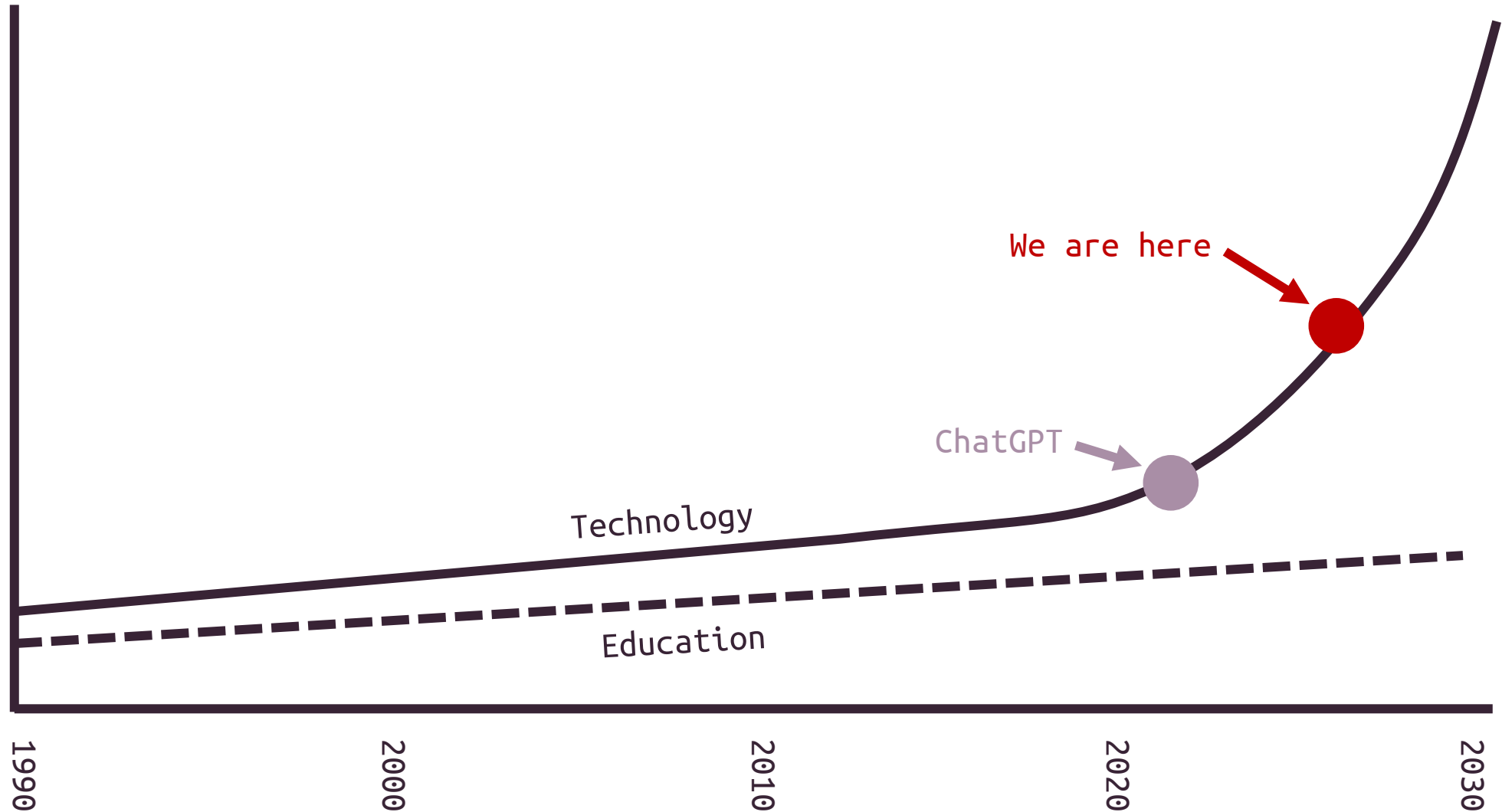


Industry

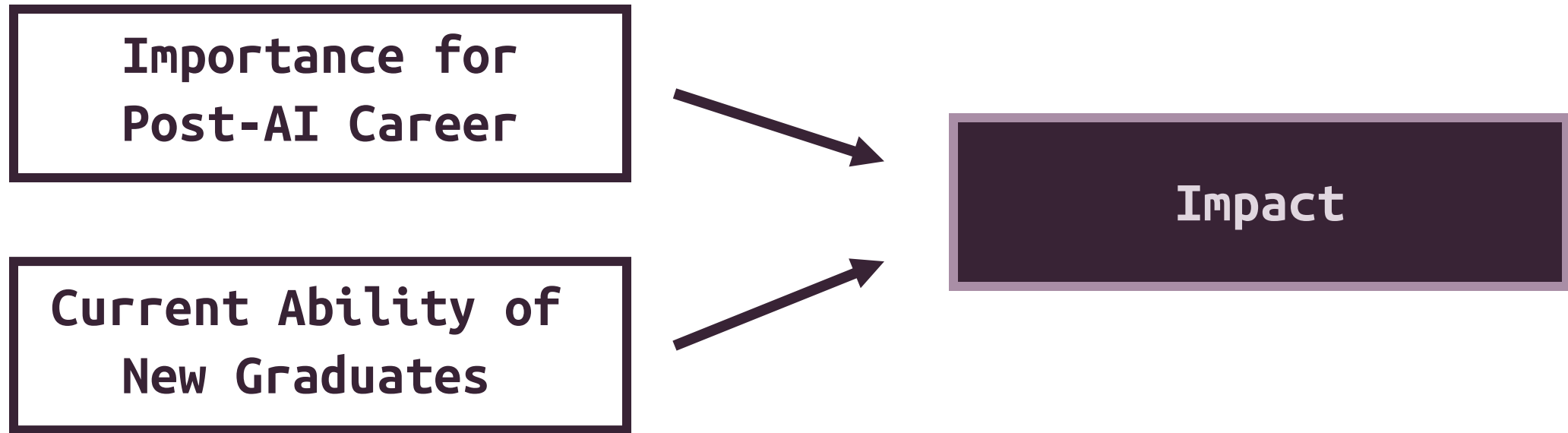


**Experience
Gap**

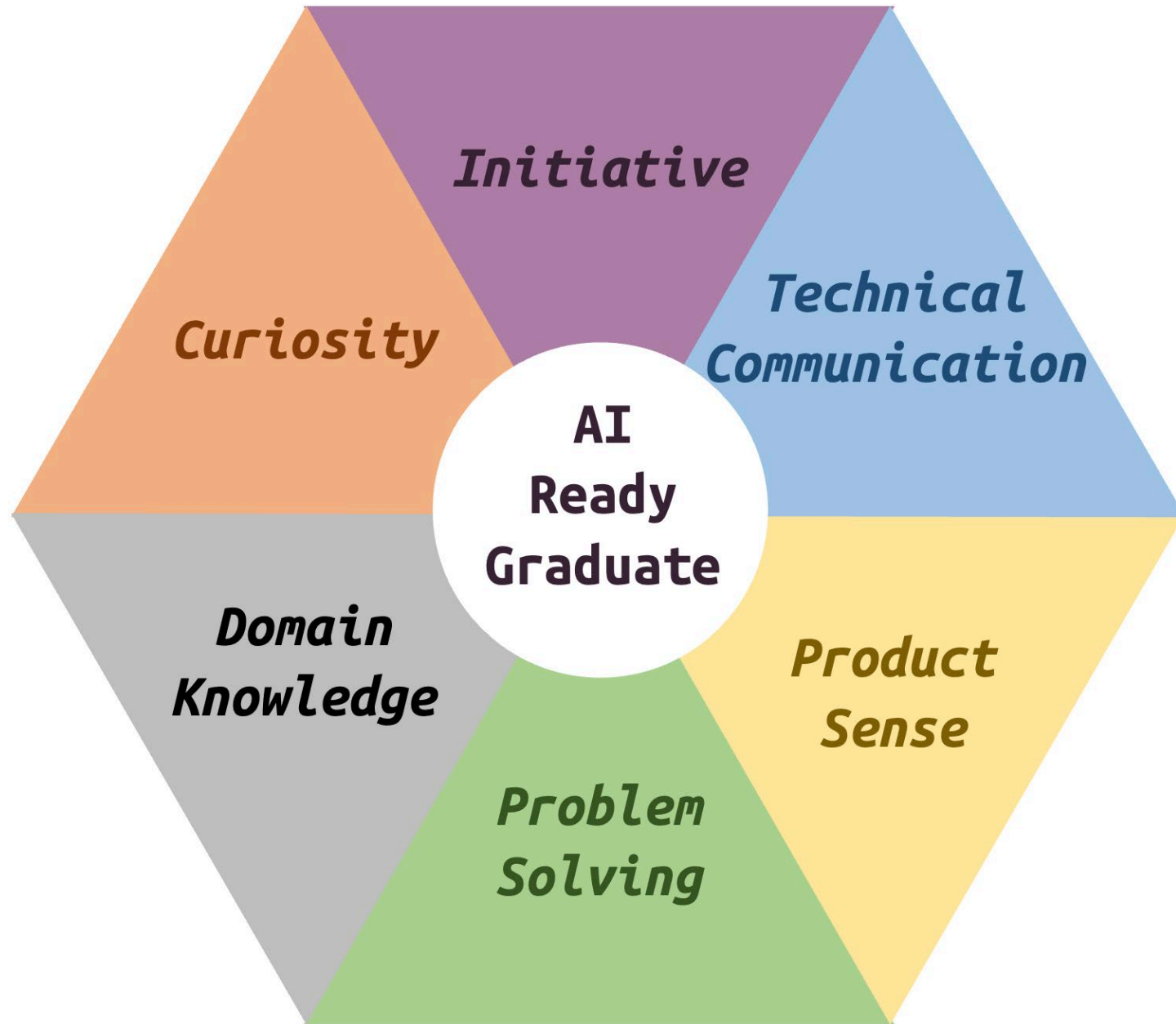
Complexity is growing exponentially



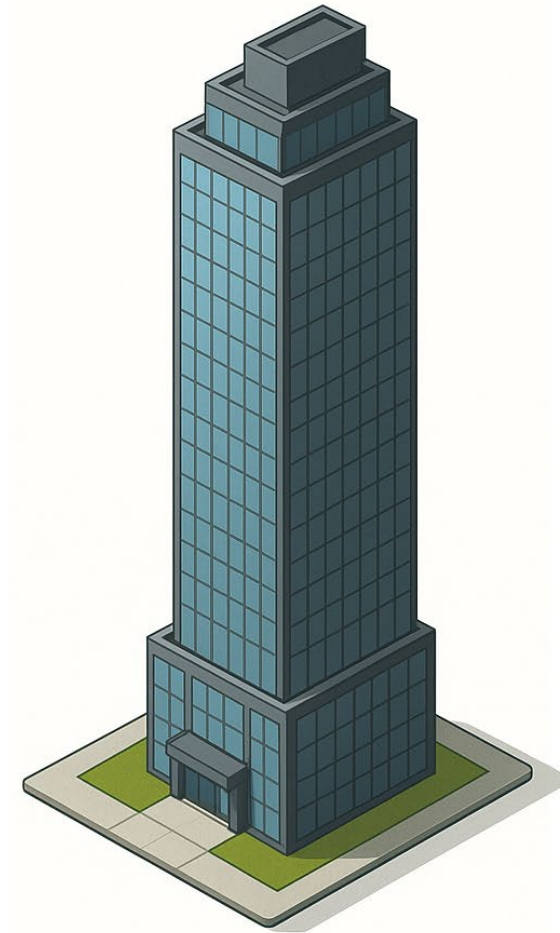
We asked 480 hiring managers



Menezes, Tyler. 2023. "What Skills Do CS Grads Need? Colleges And Employers Disagree." In *Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 2*, 1425. SIGCSE 2023. New York, NY, USA: Association for Computing Machinery.
<https://doi.org/10.1145/3545947.3576369>.



Industry



**Undergraduate
Programs**



**Experience
Gap**

The Open Source Internship



kubernetes

The “operating system”
for cloud computing

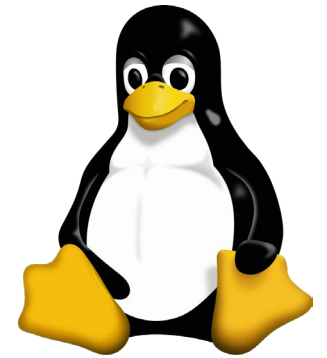


Used by 70%
of web users



android

3 billion
active devices

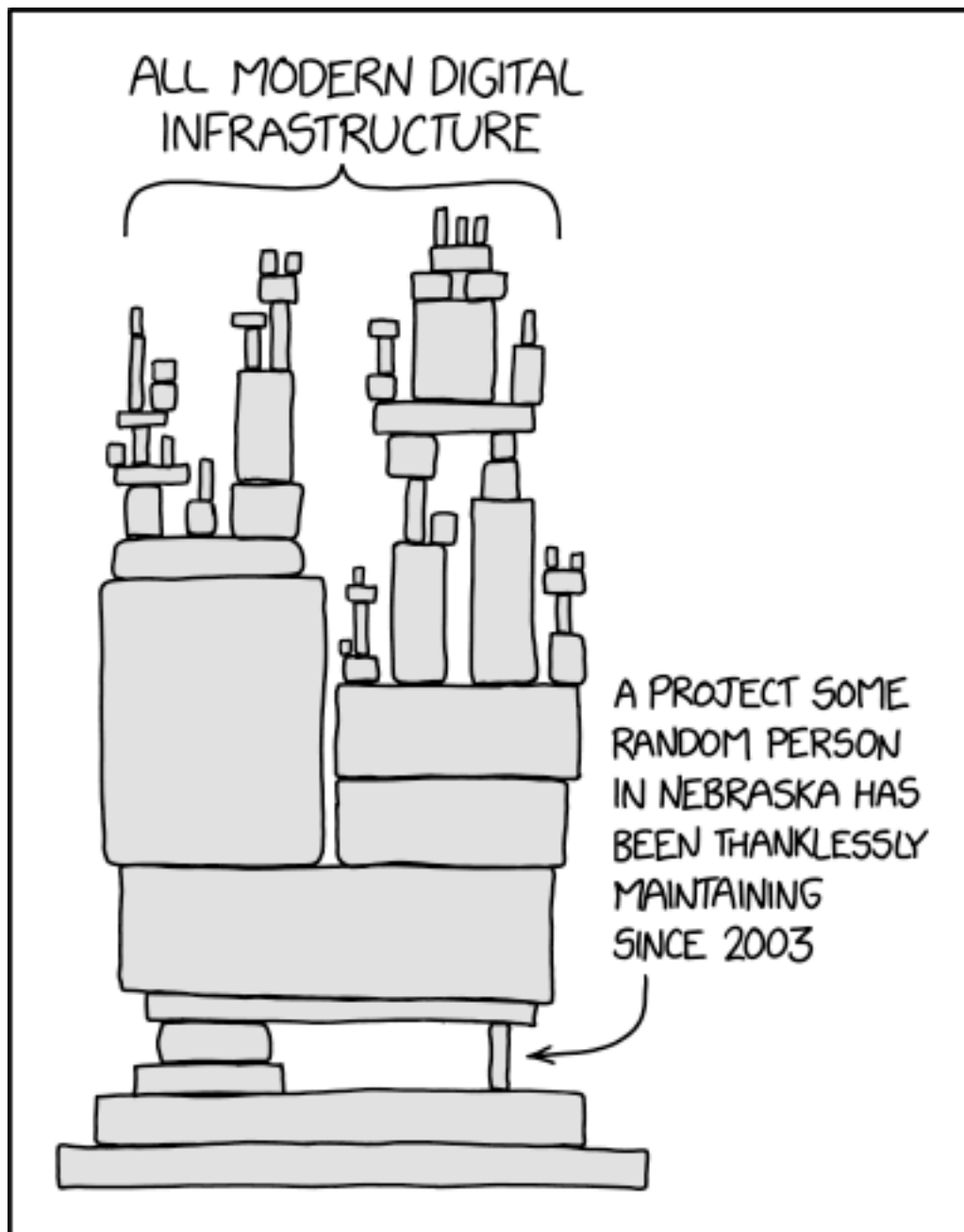


Powers 97% of
servers

“Smallest” partner project: 1 user.



(But the one user is NASA, for their space hardware.)



Randall Munroe. 2020. "Dependency." *Xkcd* (blog).
August 17, 2020. <https://xkcd.com/2347/>.

Good First Issue

Help Wanted

Projects are asking for help!

Up For Grabs

Simple Task

3 students



**1 OSS
issue**

```
<!doctype html>
<html>
<head>
  <title>AppCo</title>
</head>
```

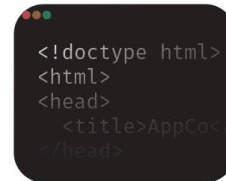
**1 industry
mentor**



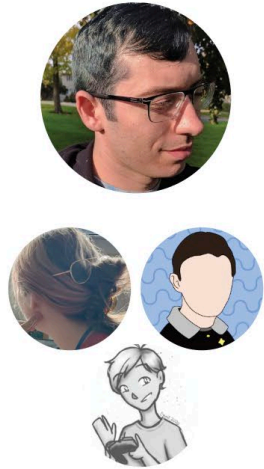
3 students



**1 OSS
issue**

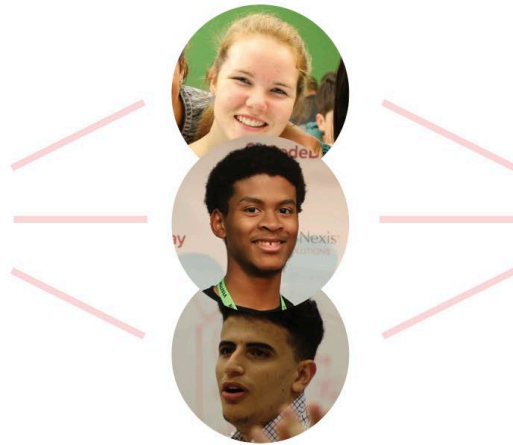


**1 industry
mentor**



+TAs

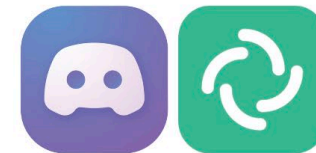
3 students



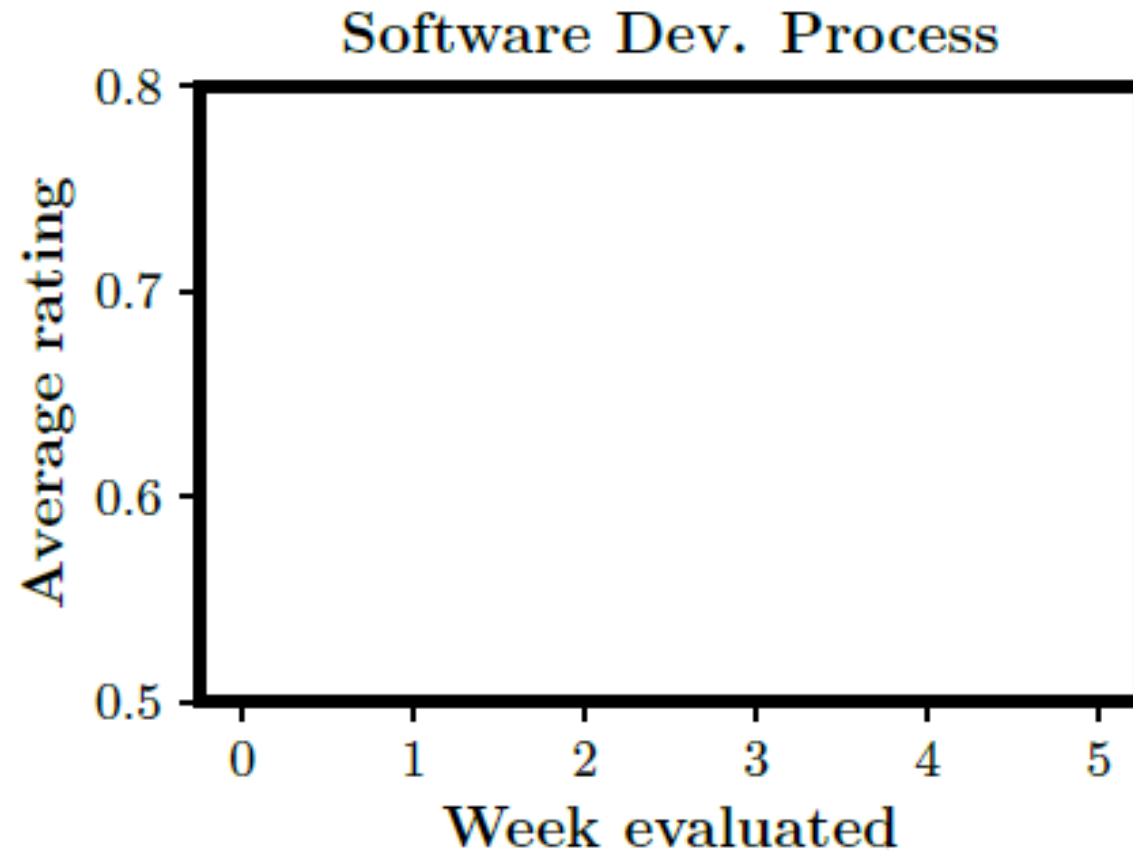
**1 OSS
issue**




**Community/
SME mentors**



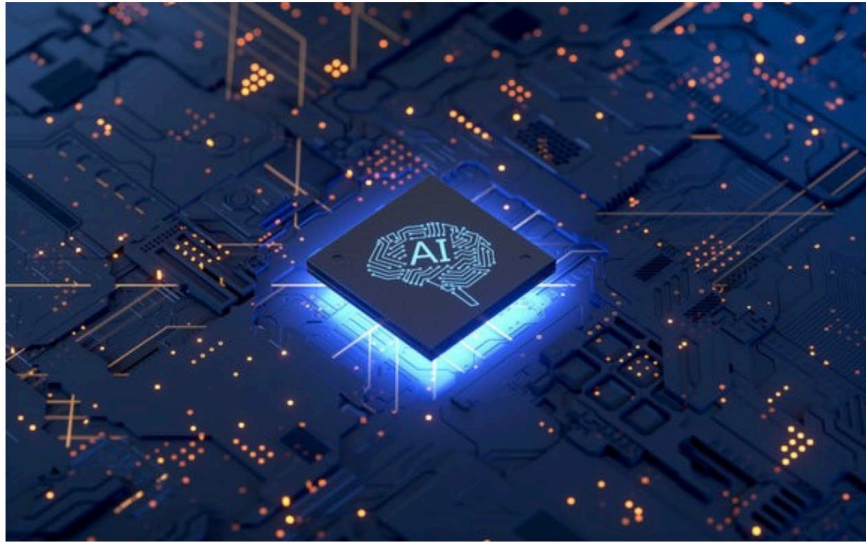
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Technology/Framework Onboarding (No Mentors)					
	Building & Finding “Starting Points”					
	Project Work					
	Submit First “Pull Request”					
	Increasingly Complex Contributions					




Menezes, Tyler, Alexander Parra, and Mingjie Jiang. 2022. "Open-Source Internships With Industry Mentors." In *Proceedings of the 27th ACM Conference on on Innovation and Technology in Computer Science Education Vol. 1*, 365–71. ITiCSE '22. New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/3502718.3524763>.



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My Summer Internship: Contributing To Microsoft's Semantic Kernel Project




Alisha Maddy ✓
Aspiring Software Engineer | MLH Fellow '23 and '24 | UC Santa Barbara CCS '19

August 14, 2023


This summer, I participated in an eight-week software engineering internship with CodeDay Labs in collaboration with CTI Accelerate. Through this opportunity I became a contributor to Microsoft's Semantic Kernel project, and learned a lot about large language models such as Chat-GPT. The program

Comments

👤 24 · 5 comments · 3 reposts

 [Like](#) [Comment](#) [Share](#)


Most recent ▾



James Ramos ✓ · 1st
Software Developer @ Strawbridge Studios

Hey Alisha, I learned so much reading about the process you went through and the technicalities of your issue(s). Thanks for sharing the demo! Great writeup - I really felt like I went through the past few weeks with you!


[Like](#) · 1 | [Reply](#) · 1 reply



Alisha Maddy ... **Author**
Aspiring Software Engineer | MLH F...

Hi James, thank you for your feedback!

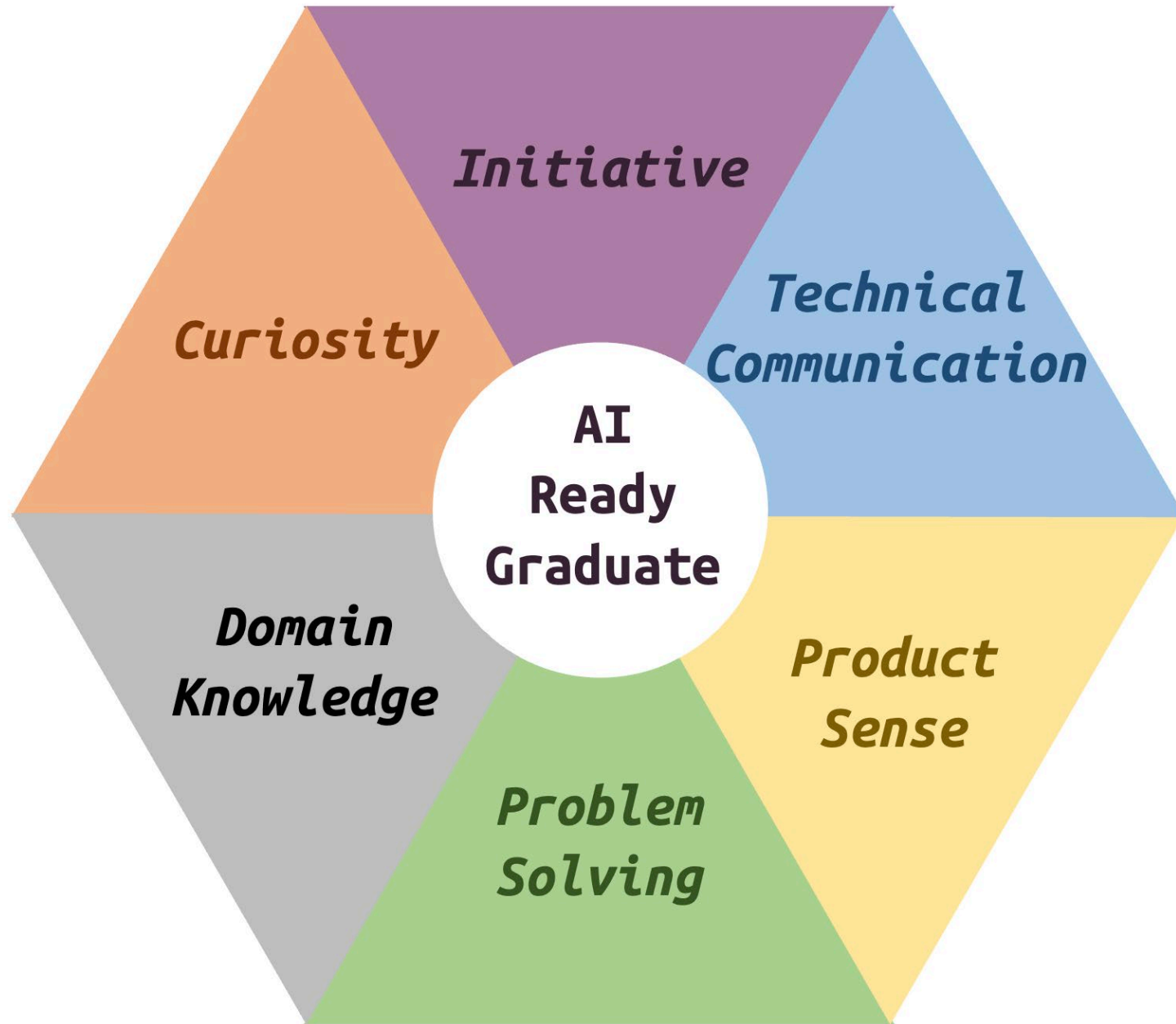
[Like](#) | [Reply](#)



Alex Chao ✓ · 2nd
AI Research and Product | Ex-Uber ATG, ...

Thank you so much for your contributions Alisha! Would certainly love to have you continuing to be a part of the Semantic Kernel community even after your internship!

Utsab Saha, Ramiz Rahman, Lola Egberman, and Tyler Menezes. Writing Blog Posts Help Students Connect Experiential Learning to the Workplace. 2025.



1,557
OSS
Contributions

475K
Hours of
Work

20K
Hours of
Mentorship

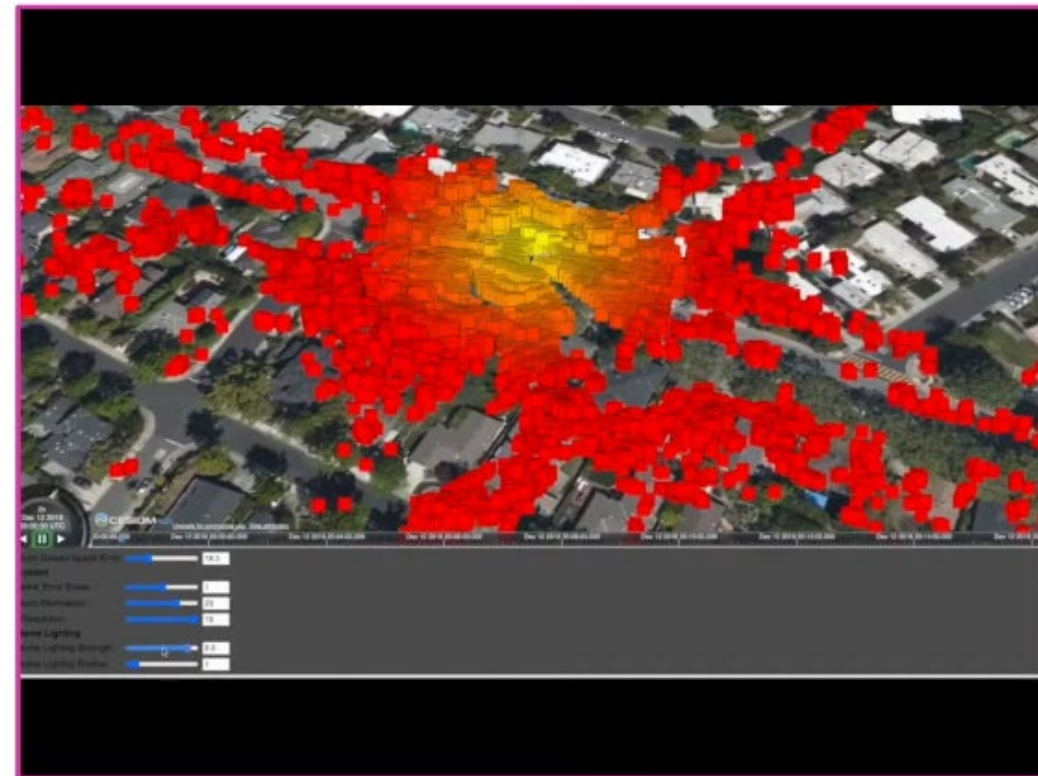
Visualizing Self-Driving Car Sensors

Mehrab H., Shania D., Yen L. / Omar Shehata (Cesium)



Example sandcastle:

<https://sandcastle.cesium.com/index.html?src=3D%20Tiles%20Point%20Cloud%20Shading.html>



2.4x

**More likely
to get a job**

3x

**Faster
Onboarding**

\$45K

**Savings
Per Hire**



Global NaaS Event

