

2024: **R**etooling, **R**eskilling, **R**ebranding



SW2Con
May 2024



RRR:



Sriram Subramanian

@sriramhere

Me too, looking forward to attending your RRR talk. May I suggest this as your entry music - the Naatu Naatu song from the movie RRR?



youtube.com

Naatu Naatu Full Video Song (Telugu) [4K] | RRR | NTR, Ram C
Watch Naatu Naatu Full Video Song from #RRR Telugu Movie. An M.M.Keeravaani Musical. Sung by Rahul Sipligu...

3:08 PM · Mar 19, 2024 · 45 Views



RRR:

READING

WRITING

ARITHMETIC





“According to Darwin’s Origin of Species, it is not the most intellectual of the species that survives; it is not the strongest that survives; but **the species that survives is the one that is able best to adapt and adjust to the changing environment in which it finds itself.**”

- Leon C. Megginson

RRR:

RETOOILING

RESKILLING

REBRANDING





THE DEVELOPER-
FOCUSED ANALYST
FIRM



Rachel Stephens

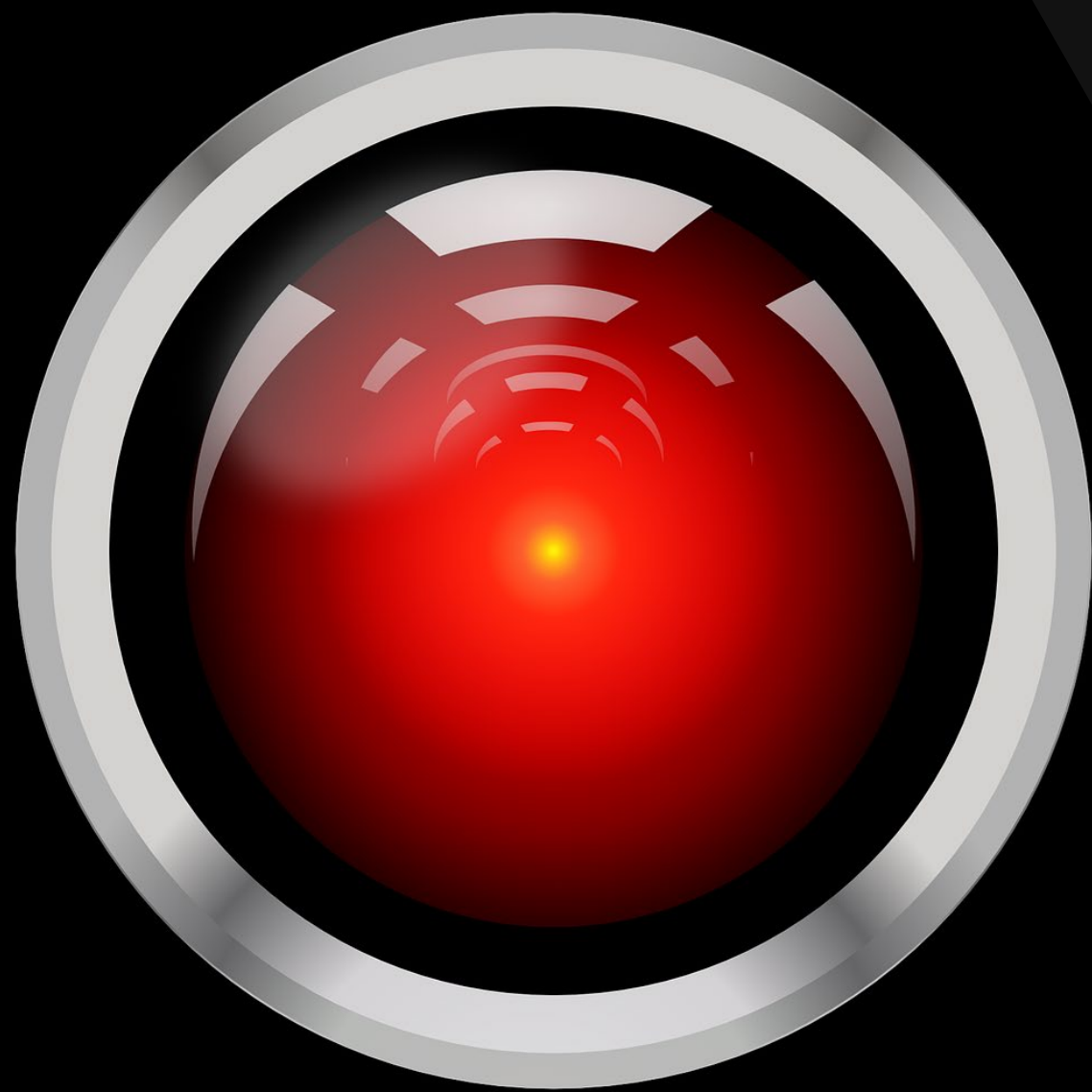


Kate Holterhoff



Kelly Fitzpatrick





RETOOLING

2019







POETS & PROGRAMMERS

WHAT TO DO WHEN YOU ARE NOT A GENIUS

GLUECON 2019

KELLYANN FITZPATRICK, REDMONK



2019 AWS Developer Influencer Summit Groups

- AI/ML
- Containers
- Databases
- Developer Tools
- Serverless



“Tools alone cannot fix a broken culture. You can’t buy your way out of a culture issue.

But that said: tools can very much lead culture. Tools can be critical to changing people’s mindset. **It’s hard to practice the right behaviors without the right foundational toolset.”**

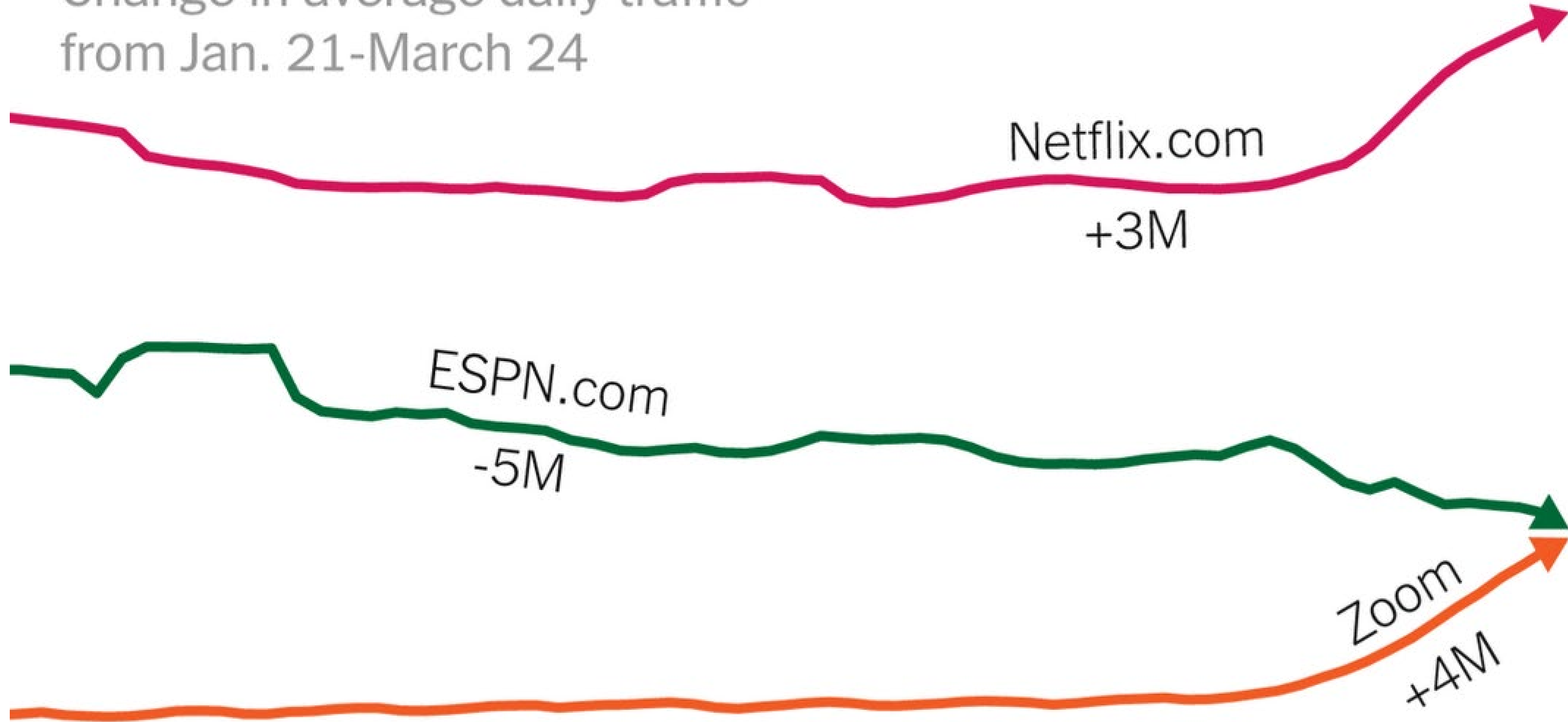
ALT + E S V

DevOps: Tools Can Lead The Culture Change

By [Rachel Stephens](#) | [@rstephensme](#) | October 25, 2019



Change in average daily traffic from Jan. 21-March 24



Source: Ella Koeze and Nathaniel Popper. "The Virus Changed the Way We Internet." *The New York Times*, April 7, 2020.





Digital Transformation

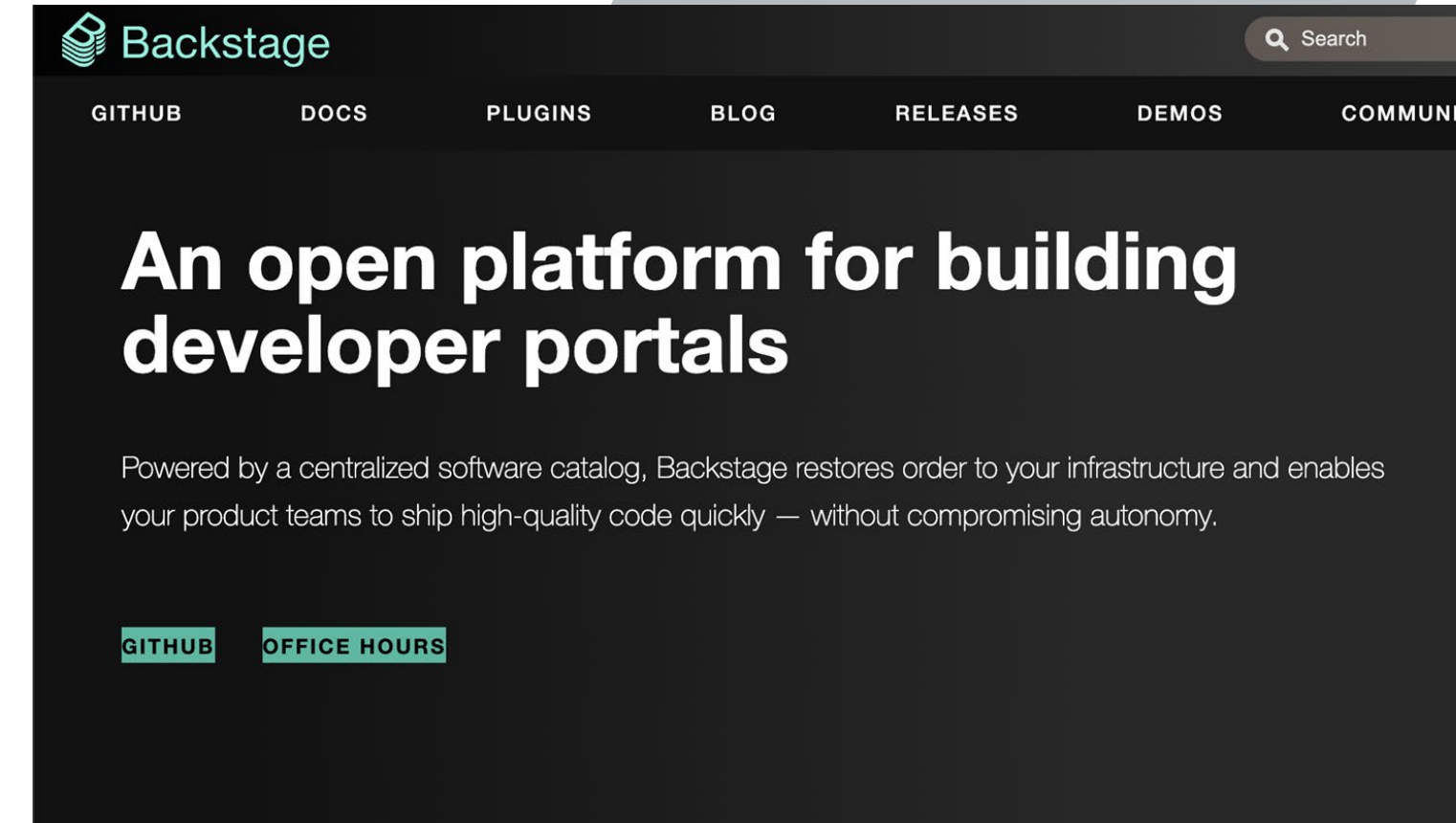
“We’ve seen **two years**’ worth of digital transformation in **two months**.”

- Satya Nadella, April 2020

TECOSYSTEMS

The Developer Experience Gap

By [Stephen O'Grady](#) | [@sogrady](#) | October 6, 2020



<https://backstage.io/>



Introducing GitHub Copilot: your AI pair programmer

Today, we're launching a technical preview of GitHub Copilot, a new AI pair programmer that helps you write better code.

Technical preview

Your AI pair programmer

```
fetch_pic.js  push_to_git.py  JS d3_scale.js  JS fetch_stock.js  JS material_ui.js

1  const fetchNASAPictureOfTheDay = () => {
2    return fetch('https://api.nasa.gov/planetary/apod?api_key=DEMO_KEY', {
3      method: 'GET',
4      headers: {
5        'Content-Type': 'application/json',
6      },
7    })
8    .then(response => response.json())
9    .then(json => {
10     return json;
11   });
12 }
```

Copilot

<https://github.blog/2021-06-29-introducing-github-copilot-ai-pair-programmer/>



steve o'grady @sogrady · Oct 11, 2022



the optimistic side of me wants to believe this, but the pessimistic side keeps shouting something about Jevon's **Paradox** and taking the under taking the under



November 30, 2022

OpenAI launches **Chat GPT**

US MARKETS CLOSED
In the news

▼ Dow Jones +0.07%

▼ Nasdaq +0.11%

▼ S&P 500 +0.09%

▼ META +0.12%

▼ TSLA +0.01%

HOME > ECONOMY

ChatGPT may be coming for our jobs. Here are the 10 roles that AI is most likely to replace.

Aaron Mok and Jacob Zinkula Apr 9, 2023, 11:36 AM EDT



Insider compiled a list of the 10 jobs that could be disrupted by AI tools like ChatGPT, according to experts. Jens Schlueter/Getty Images

- ChatGPT is only a few months old and already causing waves in the business world.



20

23

24





watsonx Code Assistant

✦ Gemini Code Assist



How can I help you today?

Write a text
inviting my neighbors to a barbecue

Tell me a fun fact
about the Roman Empire

Design a programming game
teach basics in a fun way

Explain nostalgia
to a kindergartener

Message ChatGPT



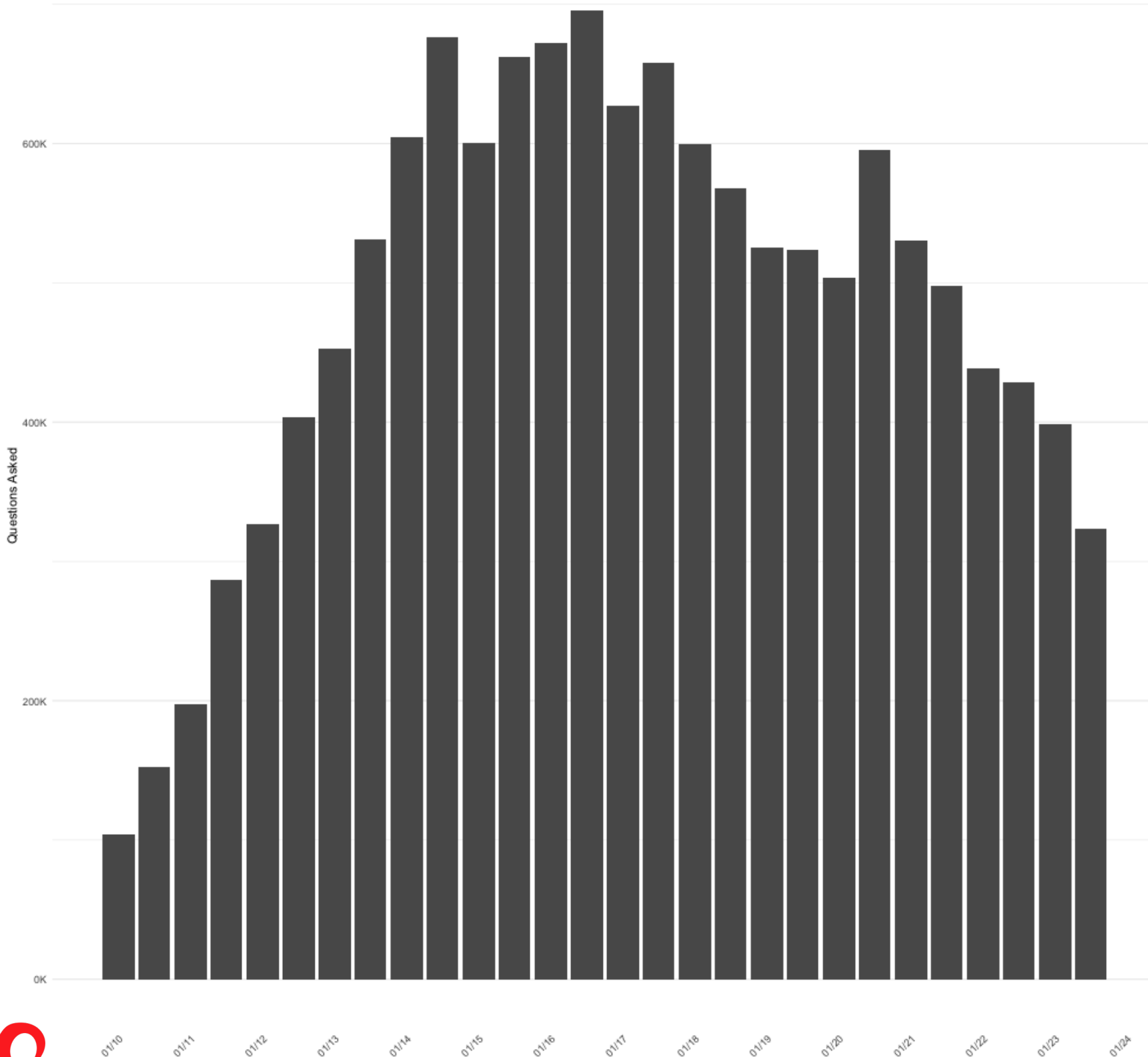
ChatGPT can make mistakes. Check important info. Read our [Terms](#) and [Privacy Policy](#).

What's Going On With Language Rankings?

By [Rachel Stephens](#) | [@rstephensme](#) | December 14, 2023

Stack Overflow Top 20 Languages Questions Over Time

RedMonk



Stack Overflow

We've been internally discussing how we're going to address the impact of AI-based code assistants on our language rankings since GitHub released Copilot in October 2021. However, it was when ChatGPT hit the market on November 30, 2022 and went from **0 to 100M users in two months** that we started seeing undeniable impacts on our source data.

We'd already seen questions asked falling off from their peak. However, when we pulled data for our June 2023 rankings the collective decline was notable.

The below chart takes questions asked on Stack Overflow about the top 20 programming languages (as determined from [RedMonk's analysis dated January 2023](#)) and look backed at historical semi-annual trends.



— *nio*

December 15, 2023 at 12:26 am

Who is using stack still these days ?.

First users get blamed that their questions are wrong.

Other users cannot ask question which where normal to ask 5 years ago.

You had a good question no luck either.

You get downvoted cause someone doesn't like you or doesn't understand your question.

Its a terrible site for finding people who had similar questions since its not a open forum.

I'm really glad these days we can use LLM's like chat gpt instead.

Retooling and **Humans**



- Many new tools (some actually helpful)
- Also new expectations re: productivity, job duties, which of these tools are allowed
- Uncertainty about what tools to use and where to learn
- How do I not lose my job to AI (or AI hype)?



Retooling and **Organizations**

- What tools to allow/vendors to trust
- Guardrails around tools for safeguarding my organization's data
- Can retooling give my team an edge?
- Is retooling enough to remain competitive?



RESKILLING

The Skills Gap

According to the Future Jobs Report issued by the World Economic Forum, **by 2025 half of all employees will need reskilling**





One thing I've noticed in the best teams in tech right now is that there's no desire to hire and mentor juniors anymore (across every discipline).



Zoom culture has also deteriorated the apprentice model of shadowing and learning through osmosis.



the CS students do not seem to be okay



r/cscareerquestions 10 hr. ago
HengeDenge

[Join](#)



It is actually hopeless.

You will never get the job you're looking for. You haven't found your 'passion.' Your computer science degree is worthless. There's a chance if you put out 1000 applications per cycle, MAYBE. Get used to working low paying jobs, and getting zero response or feedback from employers on your portfolio/prospects. By the way, the longer you go without work experience the lower your chances of finding a job get, meanwhile the market is becoming more and more inhospitable. It IS hopeless, you ARE wasting your time.



Integrating ChatGPT in a Computer Science Course: Students Perceptions and Suggestions

Kehinde Aruleba ^{a,*}, Ismaila Temitayo Sanusi ^{b,*}, George Obaido^c and Blessing Ogbuokiri^d

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^c*Center for Human-Compatible Artificial Intelligence (CHAI), Berkeley Institute for Data Science (BIDS), University of California, Berkeley, 94720, California, USA gobaido@berkeley.edu*

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ARTICLE INFO

Keywords:

ChatGPT

Artificial intelligence

Plugged activities

ABSTRACT

The integration of artificial intelligence tools such as ChatGPT in the education system has gained attention in recent years. This experience report explores students' perceptions and suggestions for integrating ChatGPT in a computer science course. Following a ChatGPT activity which includes code completion and analysis, seven students participated in in-depth interviews. Findings from the transcribed interviews suggest that ChatGPT has the potential to enhance learning experience including programming. They highlighted the tool's ability to respond immediately to queries and supporting personalised learning. However, they raise concerns that heavy reliance on ChatGPT may adversely affect students' critical thinking and problem-solving skills. These findings show the importance of carefully balancing using ChatGPT in computer science courses. The findings of this research have significant implications for educators, curriculum designers and policymakers as they explore integrating AI tools into educational contexts.

1. Introduction

Educational institutions have undergone transformative shifts in recent years by embracing digital technology to support teaching and learning experiences (Aruleba, Jere and Matarirano, 2022a; Ayanwale, Sanusi, Adelana, Aruleba and Oyelere, 2022; Aruleba, Jere and Matarirano, 2022b; Obaido, Agbo, Alvarado and Oyelere, 2023). This shift is driven by various factors, including the rapid increase of online resources (Haleem, Javaid, Qadri and Suman, 2022), the need for more accessible and flexible learning experiences (Yunusa, Sanusi, Dada, Oyelere, Agbo, Obaido and Aruleba, 2021; Criollo-C, Guerrero-Arias, Jaramillo-Alcázar and Luján-Mora, 2021), and the need to equip students with the



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RESOURCES

 r/learnprogramming · 8 mo. ago
prog_22

r/learnprogramming

learn programming

A subreddit for all questions related to programming in any language.

4.1M
Members159
OnlineTop 1%
Rank by size

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r/Unity3D

Do you use ChatGPT or AI when coding in Unity? And how?

29 comments

r/angular

Any recommendations for outputting API get response into variable?

2 comments

r/ChatGPT

What tools do you use for code generation using GPT?

2 upvotes · 10 comments

r/django

[URGENT] Can I make this in Django?

3 upvotes · 4 comments

r/ChatGPT

Do any of you use chat-gpt to learn (should I use it)?

I created a chess game with vanilla javascript

- Phase 1: just got it working.
- Phase 2: Refactored it into different modules (with vite).
- Phase 3: convert it into TypeScript (as I'm not yet 100% confident with ts, I need to mess around with just js first).
- **Phase 4: gave chat my validatePawn module and asked it questions.***
 - review it for me = not all that useful but if I ever go on an interview and if I talk about my code like chat talked about it, it's better than nothing
 - if I want to refactor it using design patterns, which ones apply? and it told me:
 - Chain of Responsibility, Template Method, Visitor, State
 - Then I asked it to rewrite the method using each pattern and it did

I just copy and pasted the code to see if it worked (it did).

I could then learn how those patterns work and ask it more questions: "I have this Chain of Responsibility patter for validatePawn, I know nothing about Chain of Responsibility pattern, please explain"

Or is this total bull and it will lead me to nowhere?

Archived post. New comments cannot be posted and votes cannot be cast.

34

57

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Sort by: Best



“I think that bootcamps will have to evolve... What’s happening with AI, and ChatGPT, and all of these tools that are able to produce code and thoughts and artifacts with such high fidelity, they will remove the lower level jobs.”

Mark Thompson, senior developer relations engineer at Google

[Resource Center](#) > [Bootcamps](#) > [State of the Bootcamp Market Report: 2023 Statistics and Share Analysis](#)

State of the Bootcamp Market Report: 2023 Statistics and Share Analysis

BY  MARC JUBERG &  JEMMA MERCER

 REVIEWED BY: **ALEX CONSIGLIO**

UPDATED JUNE 14, 2023



Since publishing our [last reports](#), the tech bootcamp space has continued to evolve within a world still recovering from the COVID-19 pandemic. We've observed this industry's resilience and adaptability, as well as its continued growth despite the many challenges the global economy has faced over the last few years.

Overall, our 2023 State of the Bootcamp Market Report shows that the US bootcamp industry continues to grow, which indicates that students are still finding value in this form of training to start new careers in tech. On the whole, students who attend bootcamps are picking up diversified, in-demand skill sets and are benefiting from the wider availability and versatility of bootcamp programs and the opportunities they afford.

Survey: What Are Coding Bootcamps, And Do They Work? Here's What Grads Say



By Mariah St. John
Education Writer



 **Brenna Swanston**
Deputy Editor

Updated: Jan 16, 2024, 10:13am

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🐦

in





Matt McDougall · 3rd+

Creative Leader | Copy | Content | Strategy

1yr ·

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Gutted to hear about the layoffs at [A Cloud Guru](#) | [A Pluralsight Company](#) and [Pluralsight](#) today. If you've been impacted - or even just grazed - happy to help however I can. I can make introductions, review resumes and portfolios, even just be someone to vent to.

Went through my own layoff fun (for the fourth time) earlier this year so I've definitely been there and get it.



[r/codingbootcamp](#) · 1 yr. ago
New_Piglet4705



App Academy Fired All Cohort Leaders for Ai

In the middle of the day during class, our cohort leaders were kicked out of the students slack channels and, App Academy made it impossible for us to reach out to our leaders personally. We later discovered, that all cohort leaders were laid off abruptly. They did not give us the opportunity to say goodbye.

At 2pm PT today, we had a meeting with App Academys CEO, Kush, who failed to show us how we will continue to move forward without this integral part of the student experience here at App Academy.

To make a long post shorter, he essentially is replacing all cohort leaders with software, he's replacing cohort leaders with Ai. All for making it easier for students to get jobs, according to CEO Kush.

So, students won't have a wonderful mentor to do the program with anymore. The cohort leaders were responsible for reading reports, ensuring students are on track, and helping students whenever any problems arise. They are replacing our leaders with software "to help us".

Students are desperately looking for a way out of the program right now. But if we do drop out, we will owe the school \$256 for everyday we have attended.

BUSINESS & DEVELOPMENT

Codeup lays off workers just weeks after moving into new office space



by **Tracy Idell Hamilton**
November 16, 2023



Sarah Murtha · 3rd+

Organized People Person - Passionate about connecti...
1yr ·

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It has been a difficult and emotional few days to say the least. Unfortunately, due to the dramatic shift in the market, as well as other compounding external factors, Tech Elevator had to lay off 32 full time employees. These were my colleagues and friends with whom I've spent the last 9 months collaborating, working, and growing to love. I was one of the lucky ones who was able to remain, but I'm left looking for a way to help support some exceptional professionals, who by no fault of their own, lost their jobs.



ada developers
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ADA DEVELOPERS ACADEMY

CHANGING THE

FACE OF TECH



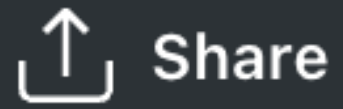
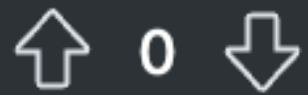


r/AdaDevelopersAcademy · 9 mo. ago
Breezygemeni



Is Chat GPT to blame?

For lack of internships? I heard on a podcast from a former CFO at Google that Chat GPT is coding for 75% of one of their previous internship partnerships.



+ Add a Comment

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🔍 Search Comments





CERTIFICATION

Microsoft Certified: Azure AI Fundamentals

Demonstrate fundamental AI concepts related to the development of software and services of Microsoft Azure to create AI solutions.

At a glance

Credentials > AI Associate



AI ASSOCIATE

ABOUT THE EXAM

The Salesforce Certified AI Associate should be able to provide informed strategies and guide stakeholder decisions based on Salesforce's Trusted AI Principles. Candidates should be familiar with data management, security considerations, common business and productivity tools, and Salesforce Customer 360.

[Get the Exam Guide](#)

STUDY & PREPARE

GO TO PAGE

Machine learning and artificial intelligence

Did you know that the adoption of machine learning results in 2x more data-driven decisions, 5x faster decision-making, and 3x faster execution?¹

Learn how to implement the latest machine learning and artificial intelligence technology by exploring training on Vertex AI, BigQuery

Jump to learning path

- Generative AI Training
- Data Scientist/ ML Engineer
- Contact Center Engineer



Sign In to the Console

Training and Certification

- Get Trained
- Get Certified
- Develop Your Team
- AWS Partner Training
- Education Programs
- AWS Cloud Institute

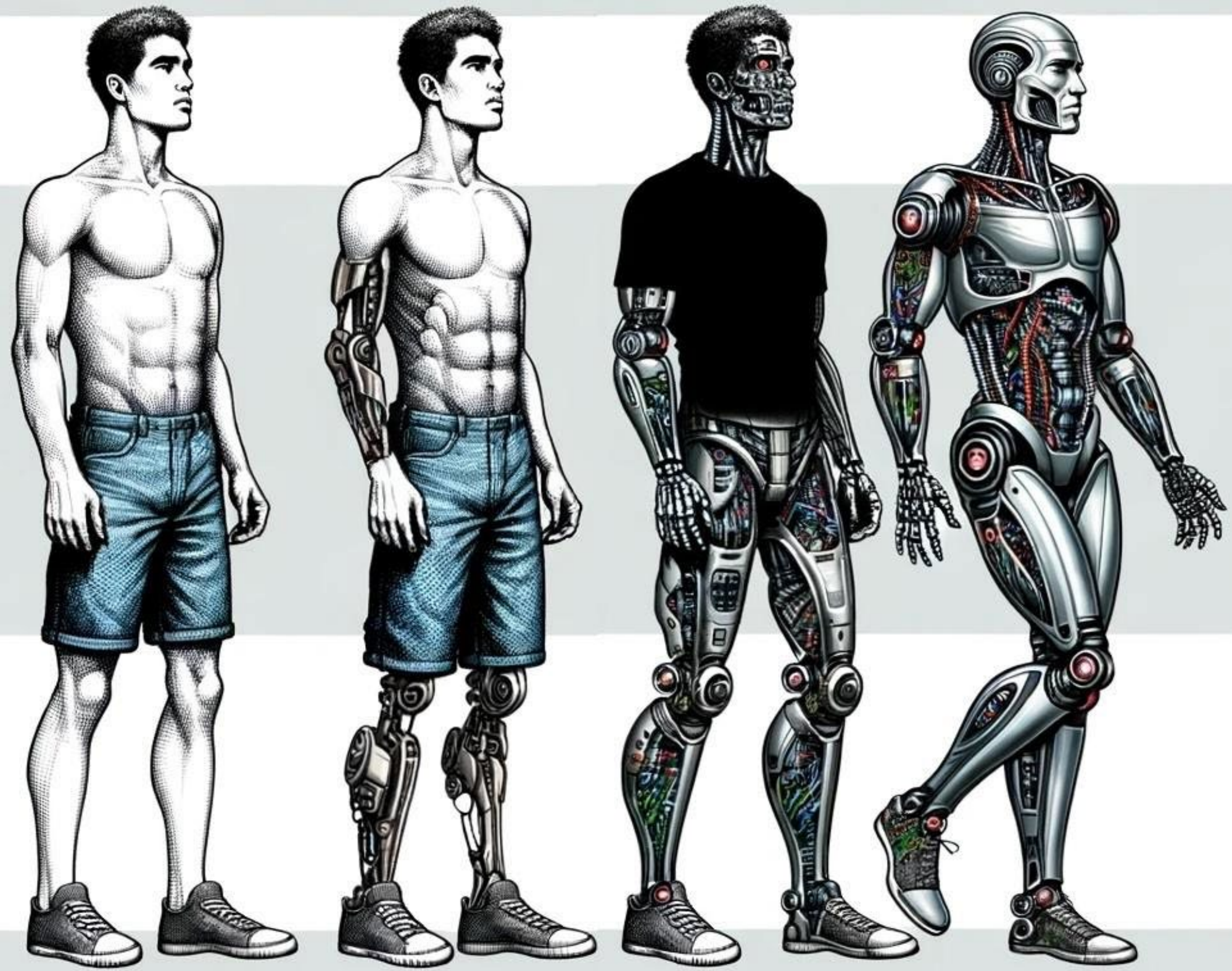
LEARN ABOUT...

Machine learning & artificial intelligence

Get started on AI/ML training with content built by AWS experts

If you're a beginner looking for a clear starting point to help you build a career or build your knowledge of machine learning in the AWS Cloud, we recommend you start with an AWS Learning Plan.

This set of on-demand courses will help grow your technical skills and learn how to apply machine learning (ML), artificial intelligence (AI), and deep learning (DL) to unlock new insights and value in





REBRANDING

Rebranding

More than a rename /
logo change



More than resume
inflation

“I have 5 years of AI experience!”

(a techbro translation guide)

- I can do linear regression!
- I have built a Slackbot!
- I created automations in Jira!

The New Developer

AI Skill Threat, Identity Change & Developer Thriving in the Transition to AI-Assisted Software Development



“**Learning culture** and **belonging** on software teams predicted a **decrease in AI Skill Threat** & an increase in both individual developer productivity and overall team effectiveness.”



The New Developer Research Paper



@grimalkina

Generative AI Adoption Toolkit



@KFosterMarks

@CSLee@mastodon.social





steve o'grady

@sogrady

new rule: as of 2024, “tech conference” and “AI conference” are now synonyms

8:29 AM · May 2, 2024 · **1,971** Views





CONCLUSION



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