

AUSTIN FORUM

ON TECHNOLOGY & SOCIETY

Event begins at 6:15pm Central time



Racing the Future: How (and Why!) Entrepreneurs and Professionals Must Engage with AI Today

December 3, 2024

Welcome to the Austin Forum on Technology & Society!

We cover emerging, disruptive, and pervasive technologies to help you understand how these technologies will influence and impact society, and how you can be a positive contributor to that!

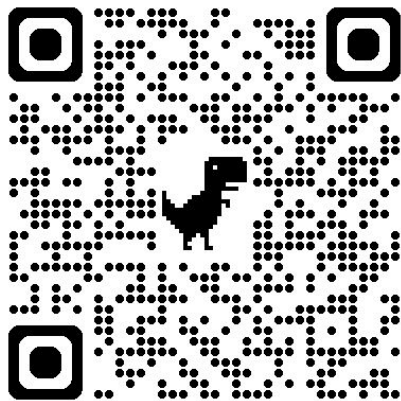
Welcome to the Austin Forum on Technology & Society!



Jay Boisseau

**Austin Forum Executive Director & Founder
(and Austin AI Alliance Founder & Executive Director,
Vizias CEO, and Remedy lead owner)**

jay@austinforum.org



Welcome to ACC Rio Grande!



Bryan Port

Director

Center for Government & Civic Service

Austin Community College

bryan.port@austincc.edu

We have 6 ways to learn, share, connect!

Live monthly events	Online content
Presentation + Networking events • Expert presenter-focused • In-person and online—hybrid • Recording and slides posted online	Workshops • Offered by Austin Forum partners and friends • Free, or with special discounts for AF attendees • Designed to accelerate technical understanding, expertise
Meetup discussion events • Participatory for everyone • In-person <i>only</i> • Never recorded—speak freely!	Slack Community, Website, Newsletter • Get updates and register for events • Learn more about the Austin Forum • Ask questions, share, etc. (Slack)
Book discussion events • Participatory for everyone • Online <i>only</i> • Never recorded—speak freely!	Podcasts: Austin Forum Upload (<i>hiatus</i>) • Audio only • Conversation formats • Hosted in all major podcast stores, AF website

Our Partners Make Austin Forum Possible!

ADAPTER

AMD

arm



CIVO

Johnson
& Johnson



NFP



SXSW

GOOD
SYSTEMS
A UT Grand Challenge

Please contact us if you want to become an annual partner!

AUSTIN FORUM
ON TECHNOLOGY & SOCIETY

www.austinforum.org

Austin Forum Upload: New episodes out now!



Episode #79: Hot Takes and Real Talk on AI with Paco Nathan - Part 1

Episode #78: A Conversation about AI, Tech, Spirituality, and Humanity

Episode #77: Lessons from a Lifelong Technology Leader on Professional Relationships



Before we get started, join our slack

Why join the Austin Forum Slack workspace?

- ✓ Continue and deepen the conversation after Austin Forum events
- ✓ Find new opportunities for collaboration, mentoring, working, and more
- ✓ Learn about other local events and relevant Tech & Society opportunities
- ✓ Because this gives *everyone* in our community—online and in-person—the *same* way to ask questions!

How?

1. Open a web browser
2. Go to: www.austinforum.org/slack
3. Click “Join the Austin Forum Slack Workspace”
4. Enter your email address
5. Check your email to confirm Slack invitation
6. Enter your name and click “Create Account”
7. You’re in! You can use the Slack mobile app now, too.
8. Add channels to your view using + **Add channels**)

Before we get started, join our slack

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4. Check your email to confirm Slack invitation
5. Enter your name and click “Create Account”
6. You’re in! You can use the Slack mobile app now, too.
7. Add channels to your view using + **Add channels.**
Make sure to add the #event-questions channel!

And now, our featured presentation...

Please:

- ✓ *Respect our speakers & audience*
- ✓ *Ask questions* in the AF Slack in the **#event-questions** channel. The question of the night will win a SXSW 2025 badge! (must be present to win)
- ✓ *Learn, think, and enjoy!*



Preview:

From Chips to Servers to Data Centers: Hardware for Training GenAI Models

THE EVOLUTION OF COMPUTE CHIPS FOR AI

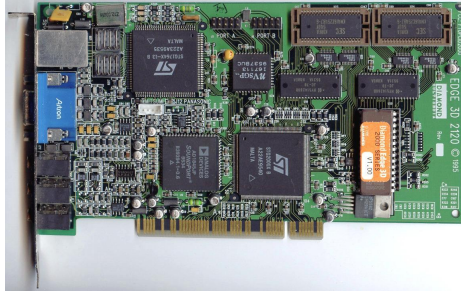
Mike Ignatowski, AMD

IN THE BEGINNING

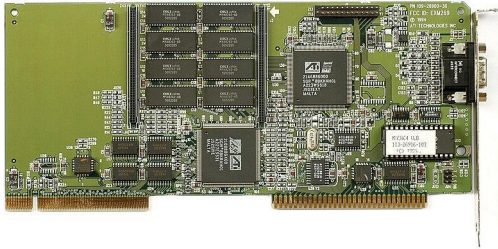
(i.e., 1990s)

Graphics Processing Units (GPU)

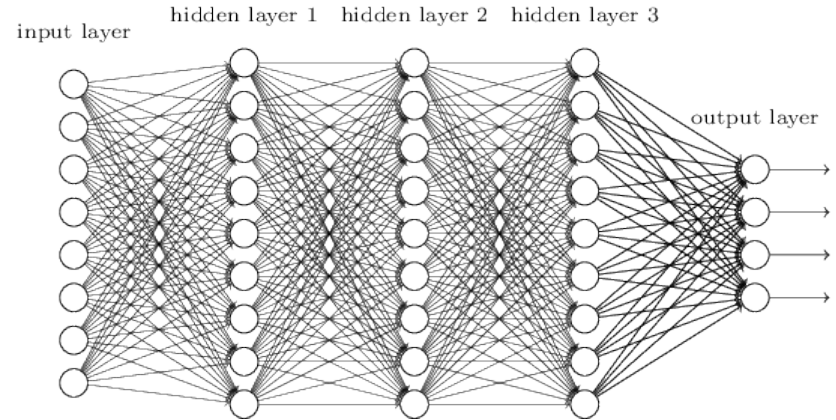
Nvidia 1995



ATI 1994 (ATI was acquired by AMD in 2006)

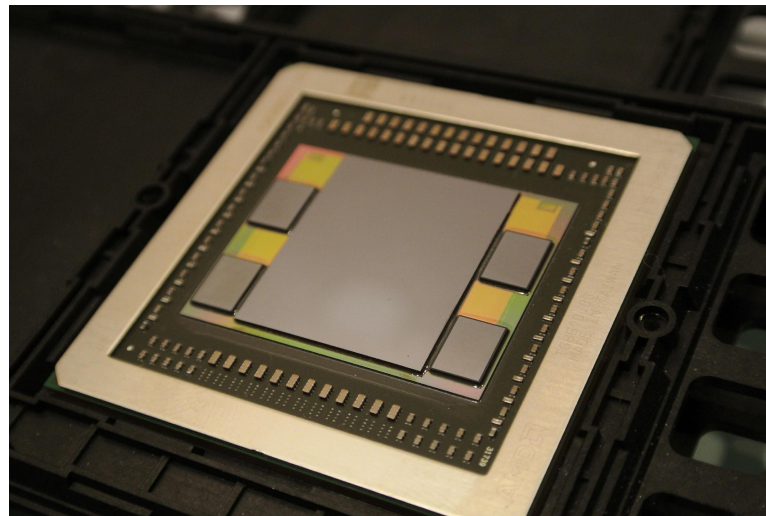
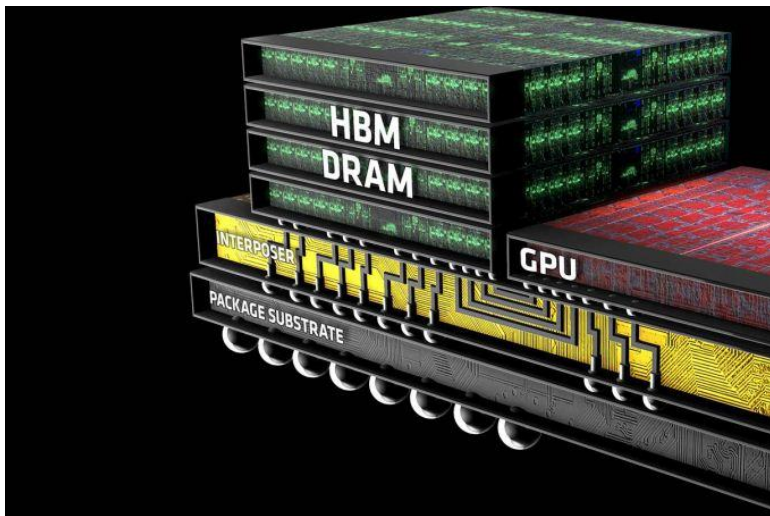


Deep Neural Networks



INTRODUCTION OF HBM MEMORY (2015)

(HBM = High Bandwidth Memory)

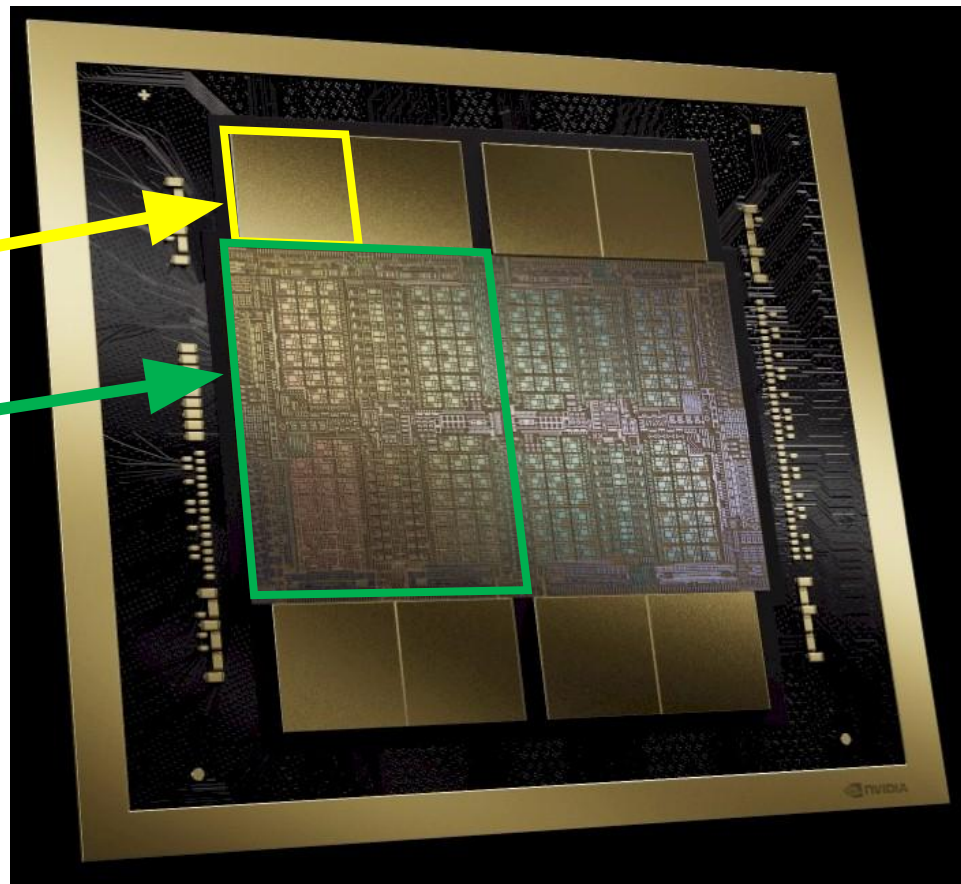


AMD Fuji GPU

NVIDIA BLACKWELL

HBM 3e memory stack

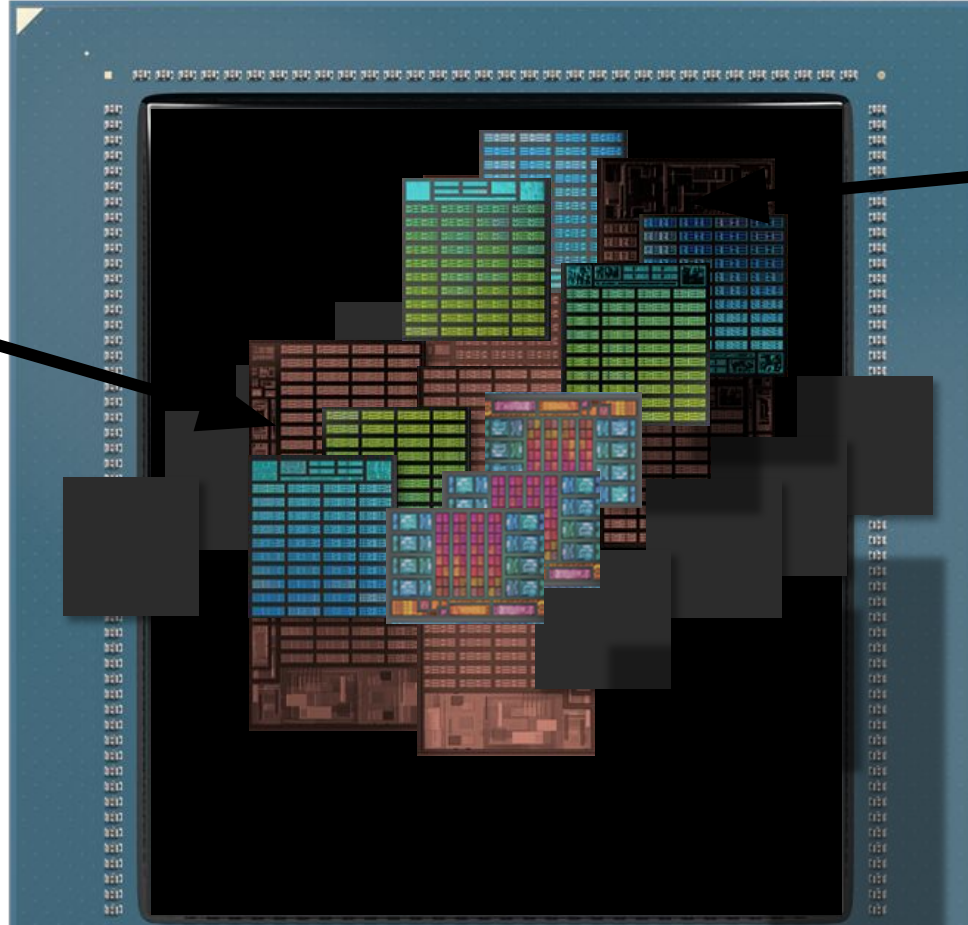
Compute Chiplet



AMD INSTINCT™ MI300A

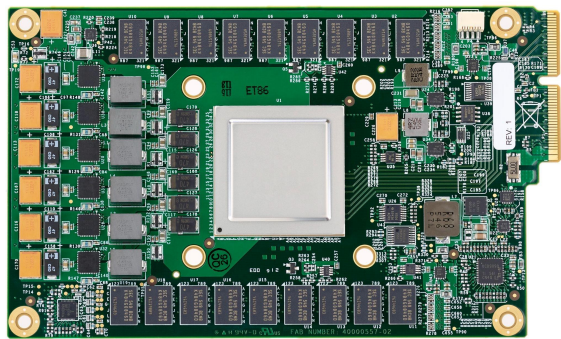
HBM Memory

Compute Chiplets



NEW KIDS ON THE BLOCK

Google



Microsoft



Amazon



Tesla



Thank you!





Powering the AI Explosion

AI Ford
US Federal Sales



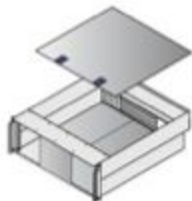


Looking at L1 through L12

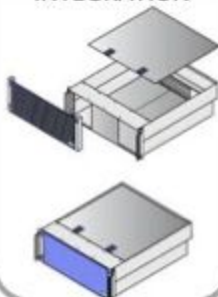
LEVEL 1 PARTS MANUFACTURING



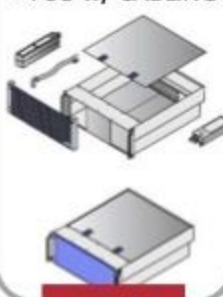
LEVEL 2 PIECE PARTS SUB ASSEMBLY



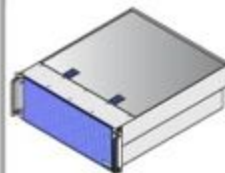
LEVEL 3 METAL & PLASTICS INTEGRATION



LEVEL 4 METAL & PLASTICS + PSU w/ CABLING

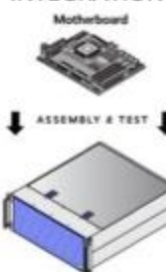


LEVEL 5 ALL ENCLOSURE PARTS FROM L4

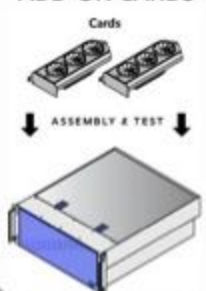


SMCI 1.0

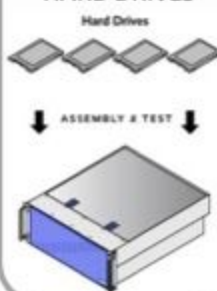
LEVEL 6 MOBO INTEGRATION



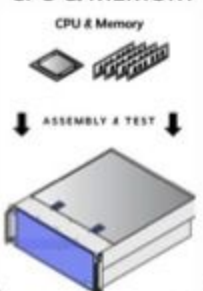
LEVEL 7 INTEGRATION OF ADD-ON CARDS



LEVEL 8 INTEGRATION OF HARD DRIVES

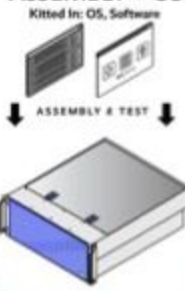


LEVEL 9 INTEGRATION OF CPU & MEMORY



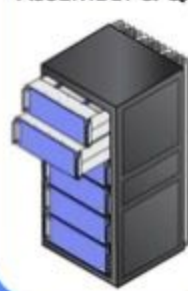
SMCI 2.0

LEVEL 10 FULL SERVER ASSEMBLY + OS



SMCI 3.0

LEVEL 11 FULL-RACK ASSEMBLY & QA



LEVEL 12 MULTI-RACK MANUFACTURING



Global Rack Integration at Scale

11MW

Rack Validation Center

Including over 3MW in High efficiency, greenhouse gas emission reductions, minimized air pollutants, and reduced water use.

Production Facility

- 55k sq ft manufacturing space
- 12K sq ft dedicated rack assembly/test
- Input Voltage: AC 277/480, 230/405, 208
- SMC/3rd party server, storage, switch

End-to-End Rack Manufacturing

Cooling: Air & Liquid Cooling

5,000+ /mo.

Rack Production Capacity

Production, Testing and Shipping
Integrated Full Scale Rack Solution.

Up to 800Gb/s

Network Speed Testing Environm

Including 10/25/40/100/200/400 Gb/s





Next Generation – Performance & Power



Intel Xeon 6 (GNR)



5th GEN AMD EPYC (Turin)



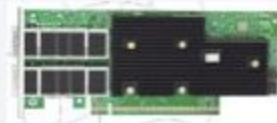
AMD MI300A APU



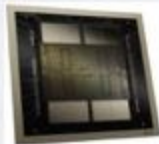
Nvidia Bluefield-3 DPU



Nvidia ConnectX-8 SuperNIC



Broadcom Thor2 400G NIC



Nvidia B200



Nvidia GB200



AMD MI325X/MI4xx



Intel Gaudi3



CXL Memory Expansion Module



NVME SSD U.2



NVMe SSD M.2



DDR5 RDIMM
8000MT/s
MCR DIMM
8800MT/s



NVME SSD EDSFF

Thank you!





Racing the Future: How (and Why!) Entrepreneurs and Professionals Must Engage with AI Today

December 3, 2024

RACING THE FUTURE

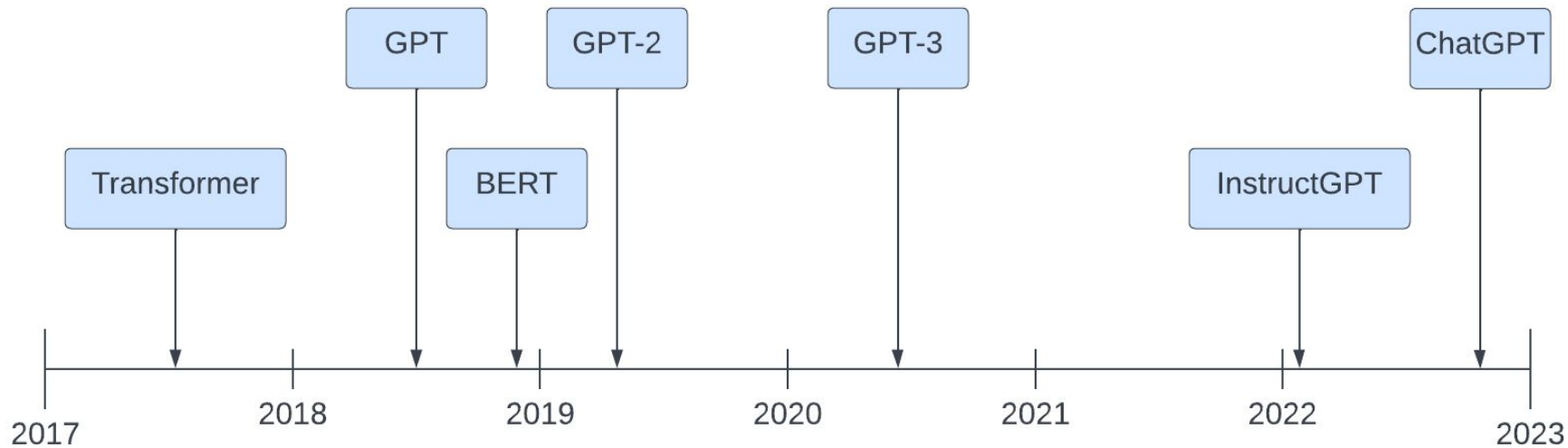
^ AND WHY
How Entrepreneurs and Professionals Must Engage with AI Today

BRYON JACOB
bryon.io

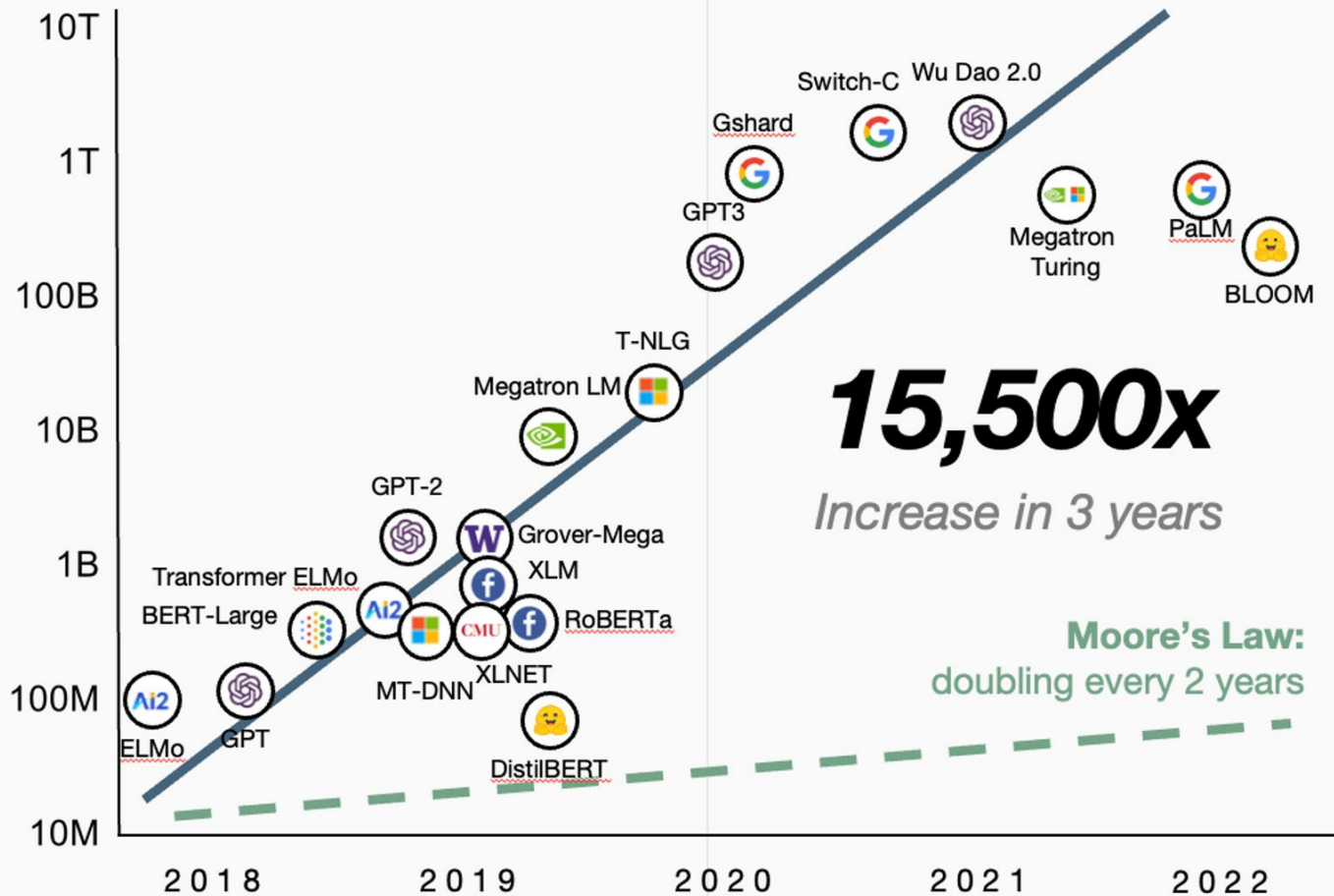


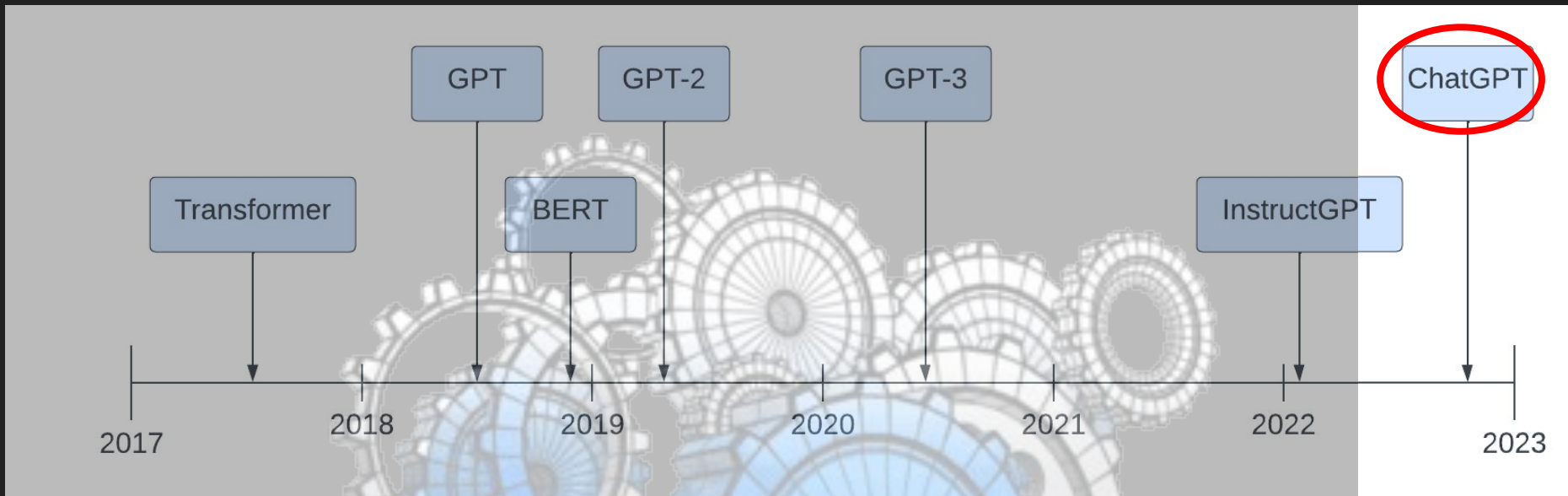
**It's not yet too late
to engage with AI**

But the window of opportunity is closing fast



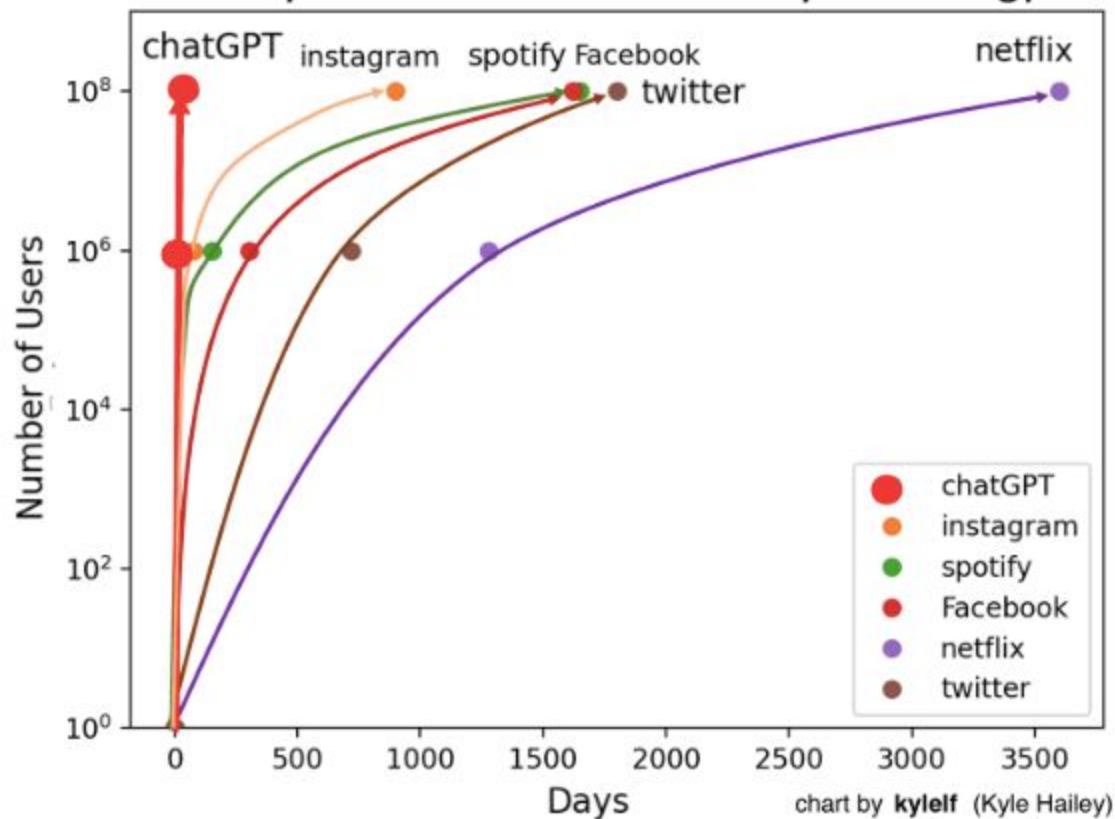
Timeline: 2017-2022



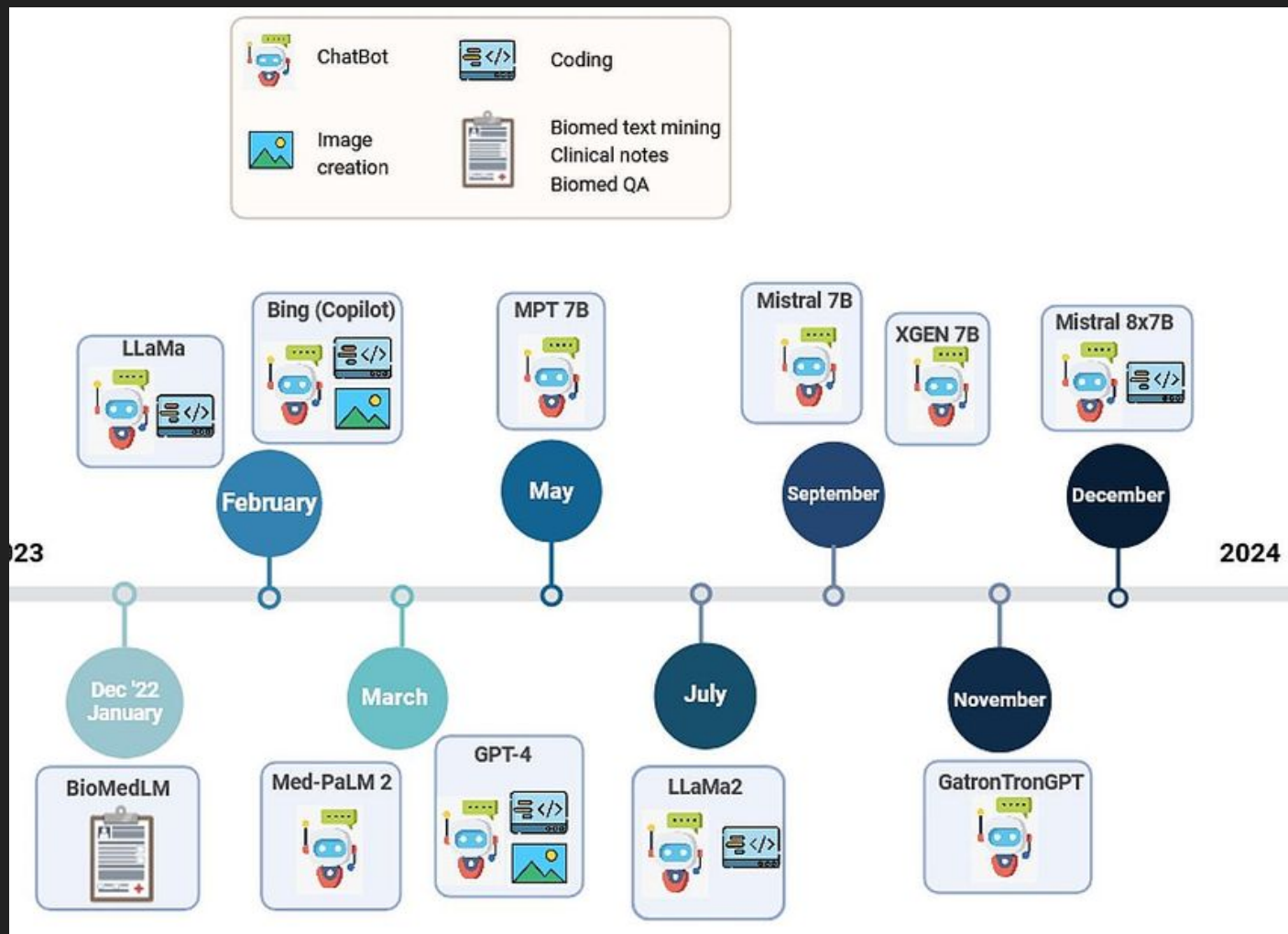


R&D

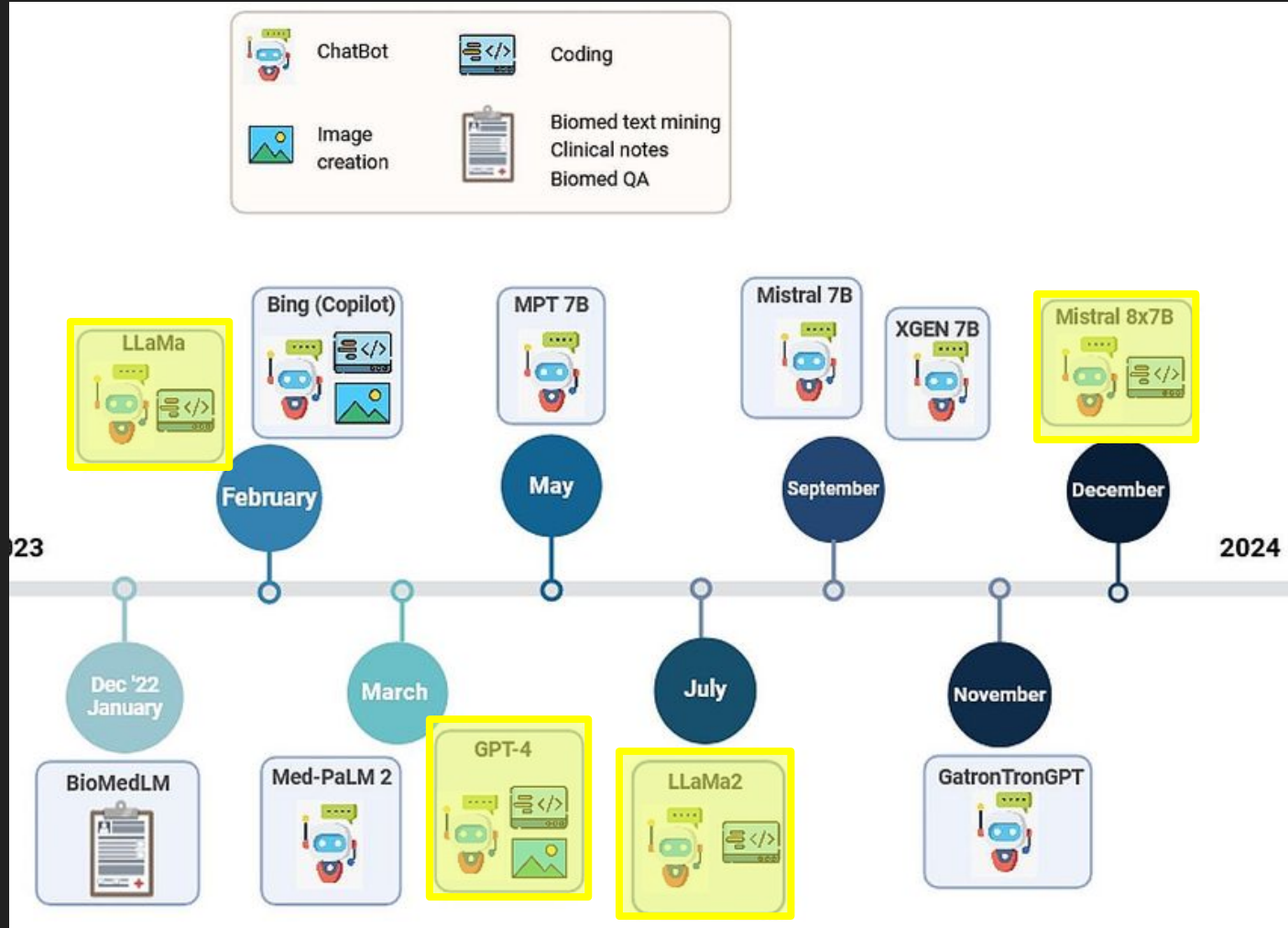
of days to 1M and 100M users by technology



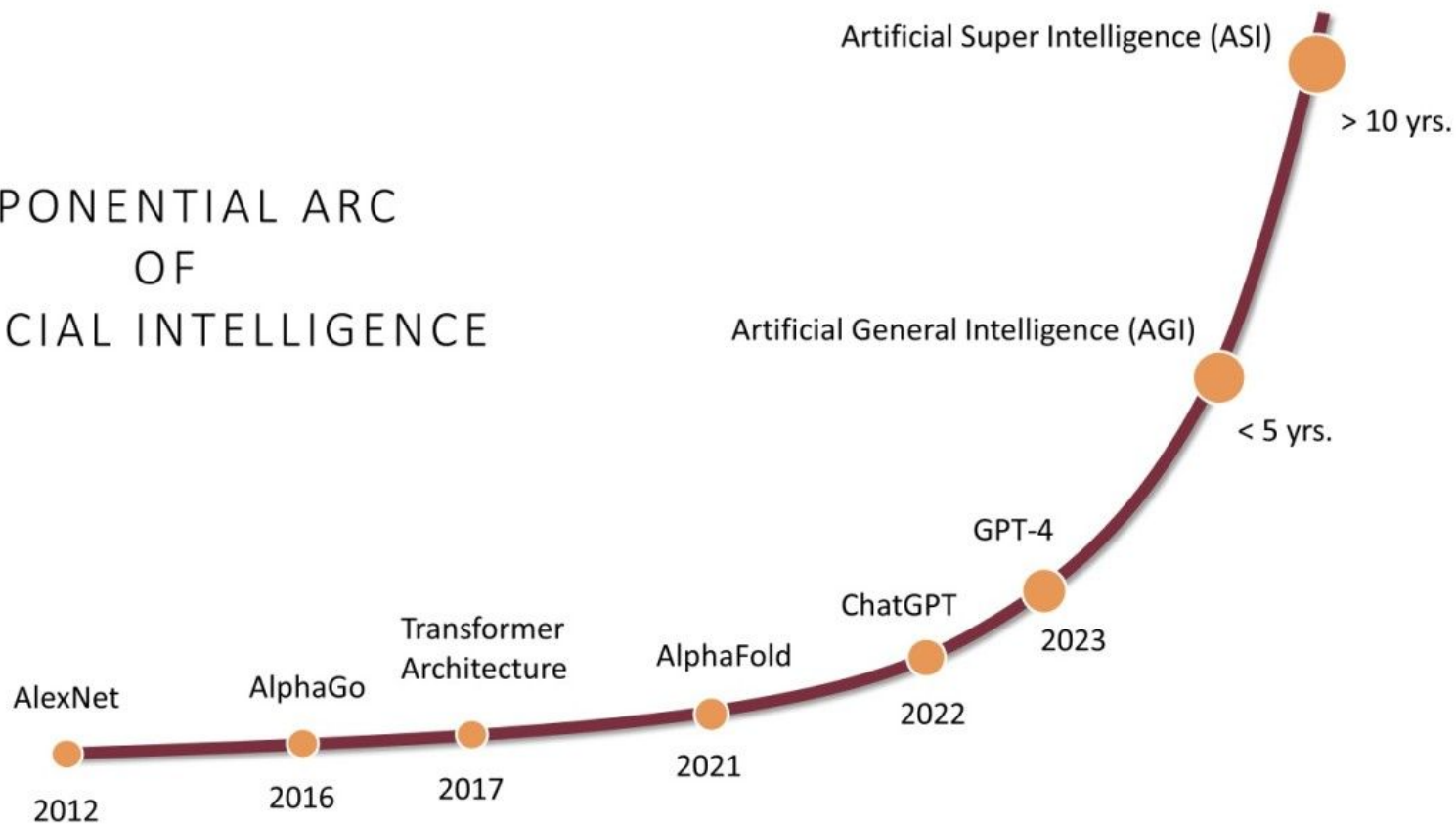
Timeline: 2023



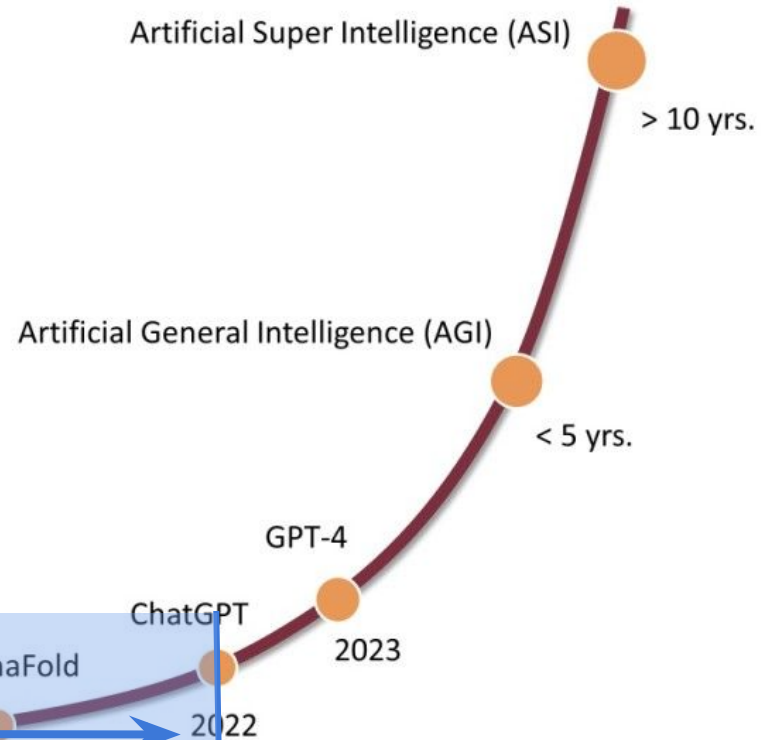
Timeline: 2023



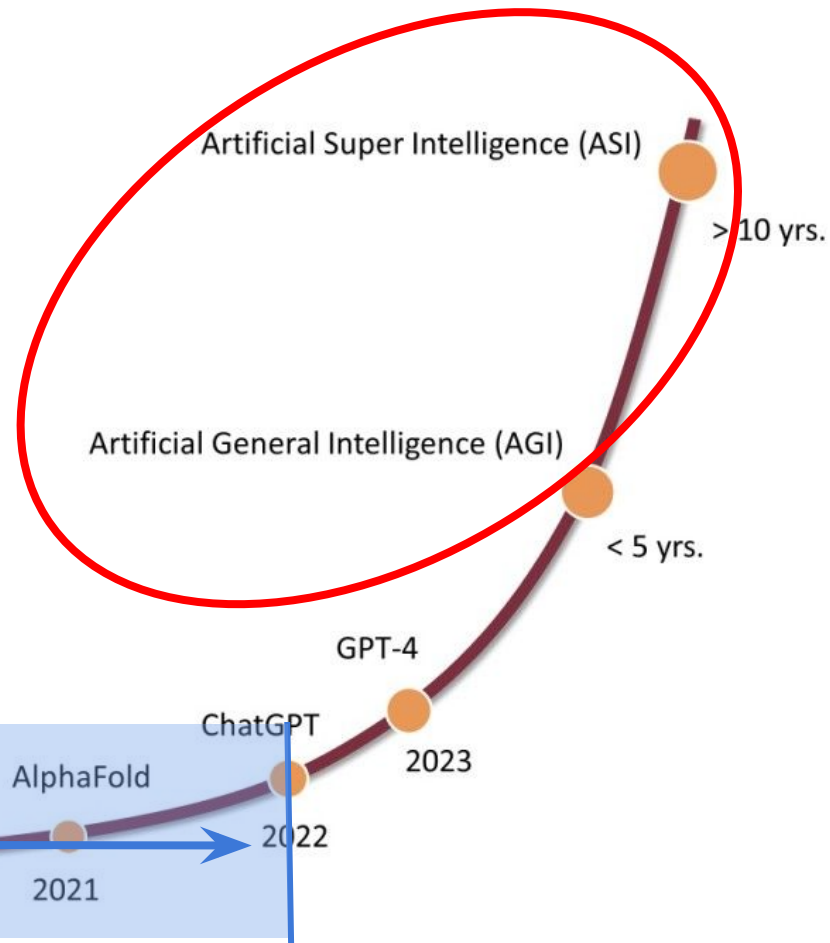
EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE



EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE



EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE



EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE

Way too hard to predict

> 10 yrs.

Too hard to predict

< 5 yrs.

AlexNet

2012

AlphaGo

2016

Transformer
Architecture

2017

AlphaFold

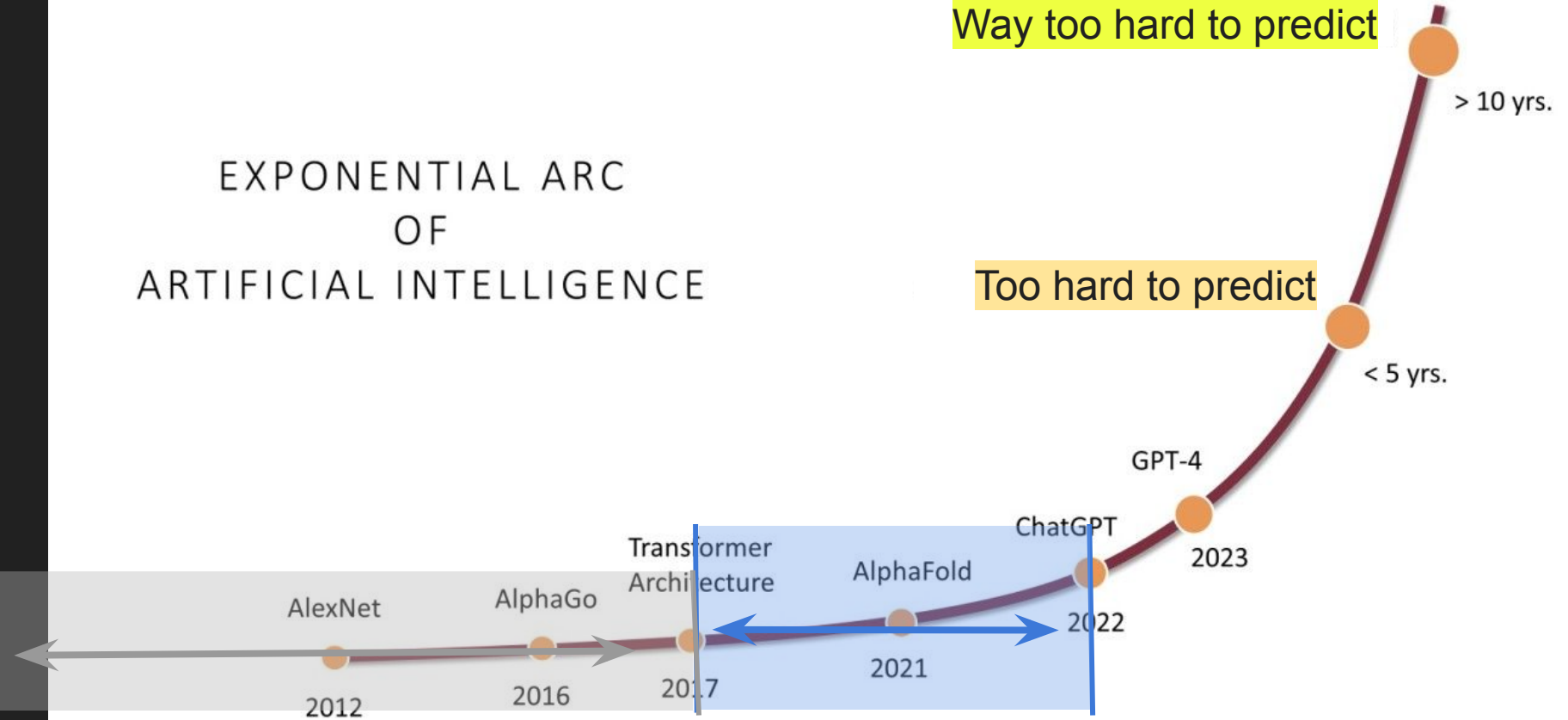
2021

ChatGPT

2022

GPT-4

2023



EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE

Way too hard to predict

> 10 yrs.

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GPT-4

2023

2022

ChatGPT

AlphaFold

2021

Transformer
Architecture

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EXPONENTIAL ARC OF ARTIFICIAL INTELLIGENCE

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GPT-4

2023

ChatGPT

2022

AlphaFold

2021

Transformer
Architecture

2017

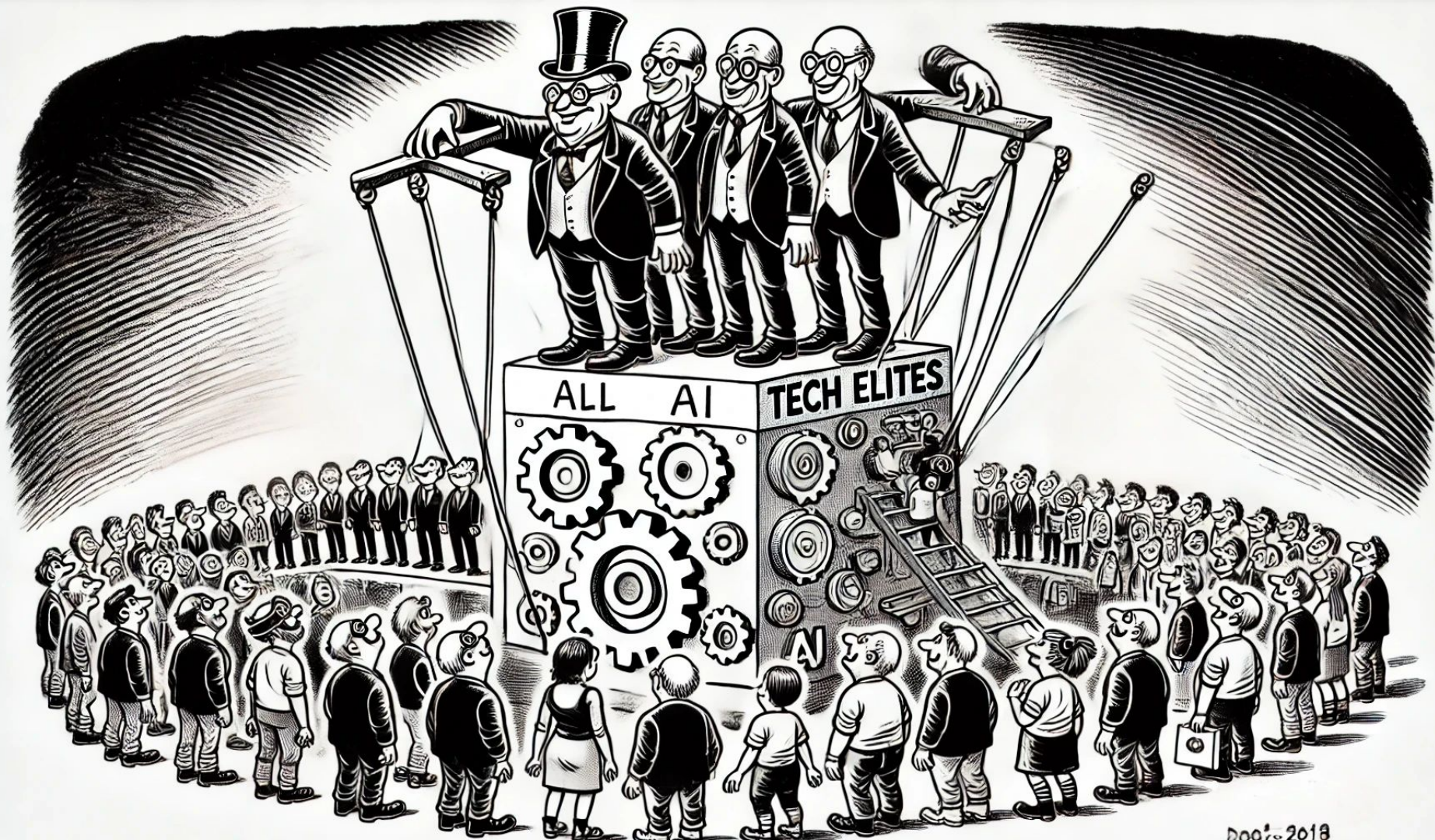
AlphaGo

2016

AlexNet

2012









The best way to learn about AI is to USE IT

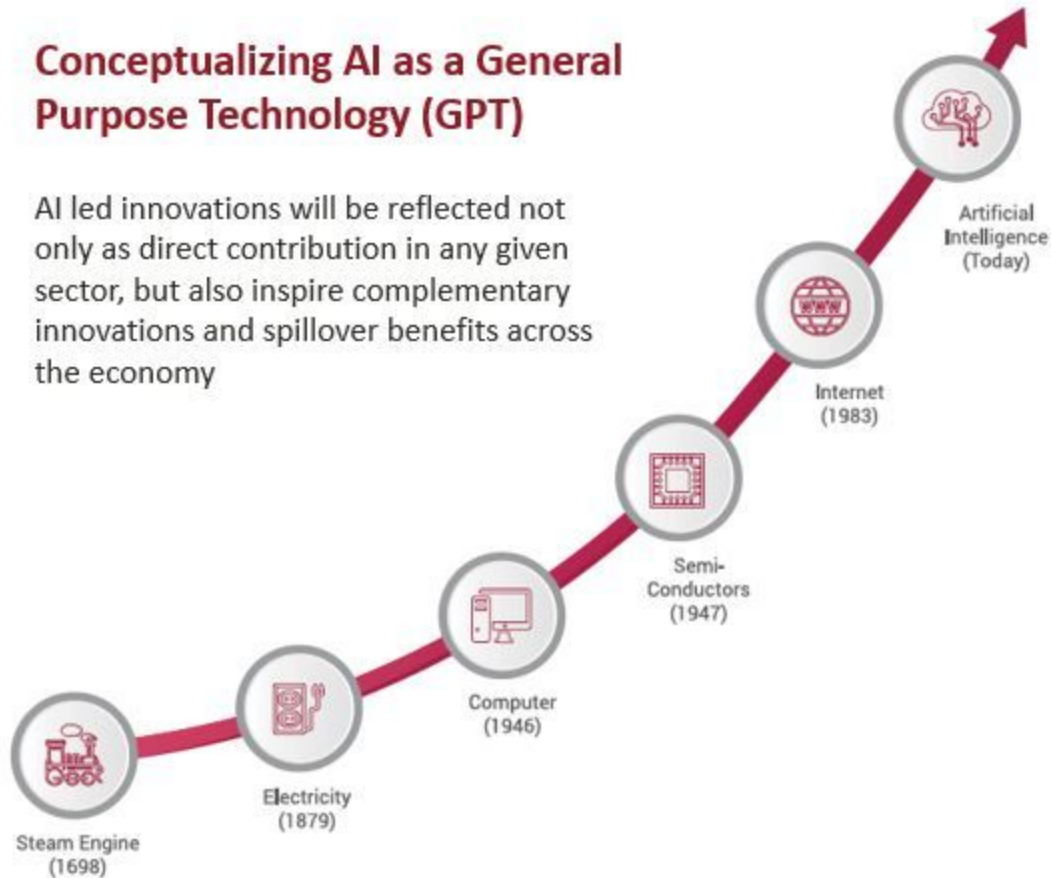
MY USE CASES

~~MY USE CASES~~

YOUR USE CASES

Conceptualizing AI as a General Purpose Technology (GPT)

AI led innovations will be reflected not only as direct contribution in any given sector, but also inspire complementary innovations and spillover benefits across the economy



Historical Instantiations of GPTs

UNLOCK THE POWER OF AI

GET!
CHATGPT
NOW!

UNLOCK THE POWER OF AI
GET THE AI OF AD!

NEVE:

CHATGPT
WRITING

CODE

ANSWERS
QUESTIONS!

GET
AI!

GET
CHATGPT
NOW!

GET CHATGPT NOW!

GET
CHATGPT

WRITING, CODING
WORKING | CODING
ANSWERS | CODING
ANSWERS QUESTIONS!

CHATGPT

CHATGPT



CHATGPT!

CHATGPT



CHATGPT APT





What can I help with?



Message ChatGPT



Create image



Brainstorm



Summarize text



Analyze data

More



Please let me know a few time slots that work for you over the next week, and I'll coordinate accordingly. In the meantime, if you have any specific areas or questions you'd like us to focus on, feel free to share them so we can tailor the demo to your needs.

Looking forward to your response.

Best regards,

Bryon Jacob

Sales Representative

ChainWise

[Your Contact Information]

	Company	Name	Title	Email	Notes
1	Amazon	John Smith	Supply Chain Director	john.smith@amazon-fake.com	Interested in real-time tracking features.
2	Walmart	Emily Johnson	Logistics Manager	emily.johnson@walmart-fake.com	
3	Home Depot	Michael Brown	Operations VP	michael.brown@homedepot-fake.com	Looking for a customizable dashboard.
4	UPS	Sarah Davis	Supply Chain Analyst	sarah.davis@ups-fake.com	
5	FedEx	David Wilson	Procurement Manager	david.wilson@fedex-fake.com	
6	Procter & Gamble	Laura Martinez	Supply Chain Specialist	laura.martinez@pg-fake.com	Has a meeting scheduled with the sales team next week.



Best regards,
Bryon Jacob
Sales Representative
ChainWise
[Your Contact Information]

Let me know if you'd like any adjustments or additional details! 🙌



Can you help me analyze leads?

What customization options does ChainWise offer?



Message ChatGPT





				I hope you r
2	Emily Johnson	Walmart	emily.johnson@wal mart-fake.com	Subject: Fol Dear Emily I hope you h
3	Michael Brown	Home Depot	michael.brown@ho	Subject: Fol Dear Mich

I've prepared the emails for the remaining leads from the spreadsheet. You can review them in the generated table provided. Let me know if you need any specific adjustments or if there's anything more you'd like to add! 🤖



Can you create a summary report?

Could you export these emails to PDF?



Message ChatGPT





What can I help with?

 Message ChatGPT



Create image



Analyze images



Surprise me



Brainstorm

More



CLAUDE

CLAUDE

BUT WAIT,
'CLAUDE'
THERE'S MORE!

CLAUDE

CLAUDE

ANTHROPIC

CLAUDE

THERE'S MORE!

Claude

Professional Plan

☀ Good morning Bryon

How can Claude help you today?

Claude 3.5 Sonnet (New) ▾



Add content



Use a project ▾



Your recent chats ▾ Show

View all →

BJ



Claude Interactive Language Learning Market Dashboard ▾

3. Detailed Data Table:

- Comprehensive view of all metrics
- Sorted by opportunity score
- Shows all relevant data points for each language

The dashboard is responsive and uses modern UI components from shadcn/ui. You can:

- Filter the data by region or learning reason to focus on specific market segments
- See how languages compare in terms of market opportunity
- View detailed information about each language in the table below

Would you like me to:

1. Adjust the opportunity score calculation formula?
2. Add additional visualizations or metrics?
3. Modify the filtering options?

 Copy  Retry  



Claude can make mistakes. Please double-check responses.

BU

Reply to Claude...



Claude 3.5 Sonnet (New) ▾

← Language Learning Market Analysis Dashboard

Preview

Code



```
<tbody>
  {sortedData.map(item => (
    <tr key={item.language} className="border-t">
      <td className="p-2">{item.language}</td>
      <td className="p-2">{item.easeOfLearning}/5</td>
      <td className="p-2">{item.popularity}</td>
      <td className="p-2">{item.toolAvailability}</td>
      <td className="p-2">{item.topRegions.join(", ")}</td>
      <td className="p-2">{item.reasons.join(", ")}</td>
    </tr>
  ))}
</tbody>
</table>
</div>
</CardContent>
</Card>
</div>
);
};

export default LanguageDashboard;
```

Last edited 2 minutes ago



Publish

3. Learning Features:

- Business-context sentence completion
- Multiple word choices
- Immediate feedback
- Encouraging messages
- Hint on incorrect answers

The prototype shows a business Spanish example: "Para maximizar las ganancias, necesitamos __ nuestro plan de marketing" (To maximize profits, we need to __ our marketing plan).

Would you like me to:

1. Add more business-focused vocabulary options?
2. Include a Japanese example as well?
3. Add additional features like progress tracking or difficulty levels?
4. Modify the visual design or feedback system?

 Copy  Retry  

Claude can make mistakes. Please double-check responses.

BU

Reply to Claude... 

Claude 3.5 Sonnet (New) ▾

← LinguaLift Language Learning App Prototype

Preview

Code



```
    })
  </div>
  })
</div>
</CardContent>
</Card>
```

```
{showCelebration && (
  <div className="fixed top-0 left-0 w-full h-full flex items-center justify-
    <div className="bg-white p-8 rounded-lg text-center">
      <Trophy className="h-16 w-16 text-yellow-500 mx-auto mb-4" />
      <h2 className="text-2xl font-bold mb-2">Great Job!</h2>
      <p>You're mastering business Spanish!</p>
    </div>
  </div>
  })
</div>
);
};
```

```
export default LanguageApp;
```

Last edited just now



Publish

lingualift

Docs

New Chat (CMD + L)

language-app-prototype.tsx 6

language-app-prototype.tsx > exercises > japanese

EXPLORER

LINGUALIFT

language-app-... 6

```
6
7 const exercises = {
8   spanish: {
9     before: "Para maximizar las ganancias, necesitamos",
10    after: " nuestro plan de marketing.",
11    correctAnswer: "optimizar",
12    options: ["describir", "optimizar", "calcular", "pre"],
13    hint: "Think about business optimization.",
14    language: "Business Spanish"
15  },
16  japanese: {
17    before: "収益を上げるために、マーケティング戦略を",
18    after: "必要があります。",
19    correctAnswer: "改善する",
20    options: ["確認する", "改善する", "報告する", "検討する"],
21    hint: "Think about improving/enhancing.",
22    language: "Business Japanese"
23  }
24 };
25 const DraggableWord = ({ word, onDragStart }) => (
26   <div
27     draggable
28     onDragStart={{e}} => onDragStart(e, word)}
29     className="bg-blue-100 px-4 py-2 rounded-lg cursor-p"
30   >
```

PEARAI CHAT

Big Cmd \ Prev Cmd 0 History Cmd H Close Cmd ; Append S<

Ask anything, '/' for slash commands, '@' to add context

PearAI Model Add Context + 🖼️ ⚙️ ↻ Use codebase ↻ Enter

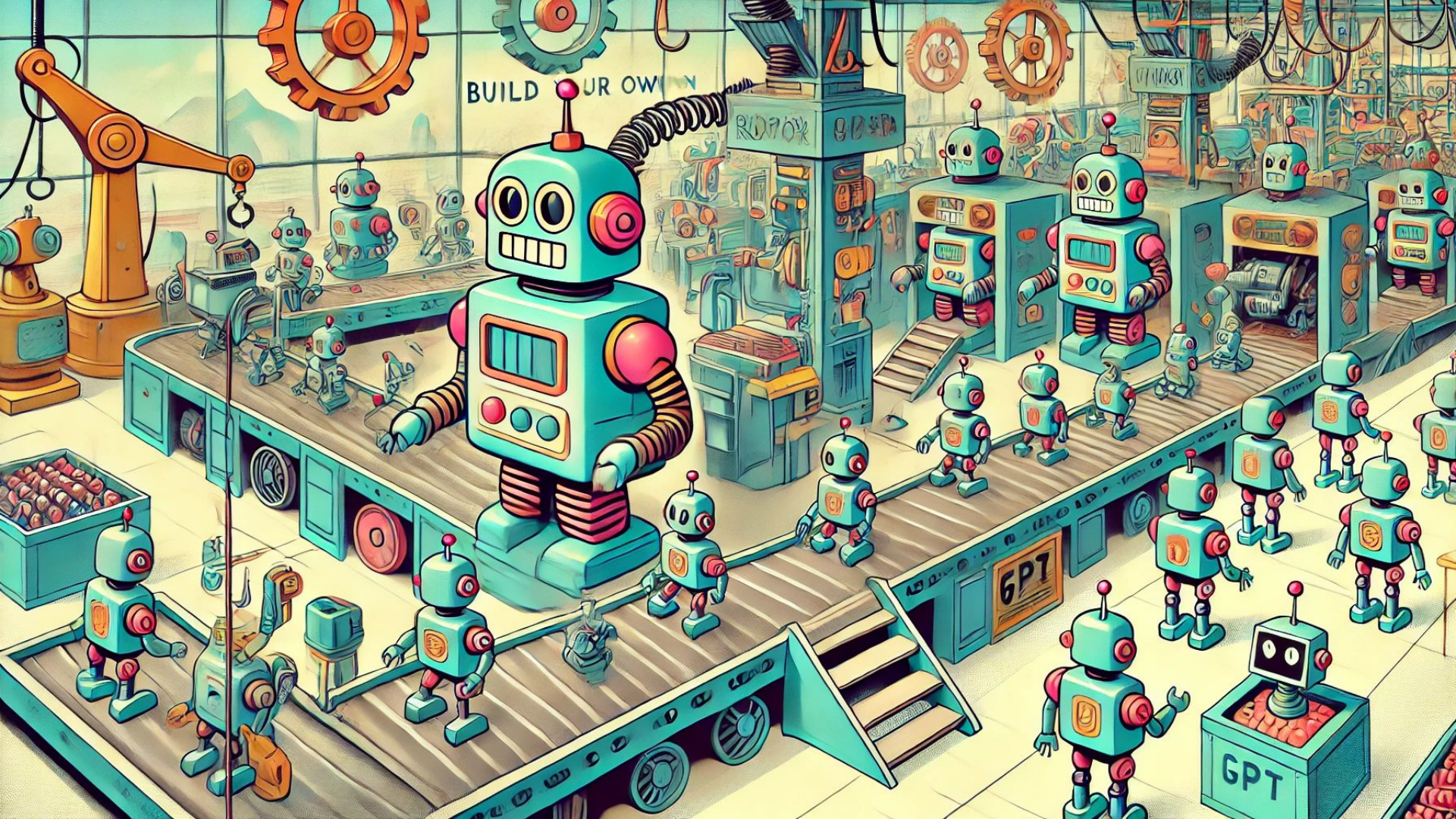
← Last Session

Index up to date Click to force re-indexing

Ln 16, Col 14 Spaces: 2 UTF-8 LF {} TypeScript JSX ✓ PearAI



Only Write Code That Writes Code



BUILD YOUR OWN

RD70X

GPT

GPT



New GPT

• Draft



Create

Create

Configure



Hi! I'll help you build a new GPT. You can say something like,
"make a creative who helps generate visuals for new products"
or "make a software engineer who helps format my code."

What would you like to make?



Message GPT Builder



Message GPT



Preview





Marketing Director

By Bryon Jacob

Decisive digital marketing expert, focused on data-driven strategies.

What should
I focus on
to increase...

Which metrics
will show
my marketing's...

What's the best
keyword strategy
for my new produ...

How can I make
my ad campaign
more effective?



Message Marketing Director





Introducing computer use, a new Claude 3.5 Sonnet, and Claude 3.5 Haiku

We're also introducing a groundbreaking new capability in public beta: **computer use**. Available [today on the API](#), developers can direct Claude to use computers the way people do—by looking at a screen, moving a cursor, clicking buttons, and typing text. Claude 3.5 Sonnet is the first frontier AI model to offer computer use in public beta. At this stage, it is still [experimental](#)—at times cumbersome and error-prone. We're releasing computer use early for feedback from developers, and expect the capability to improve rapidly over time.



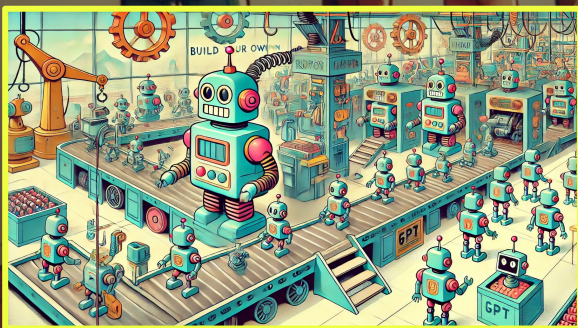
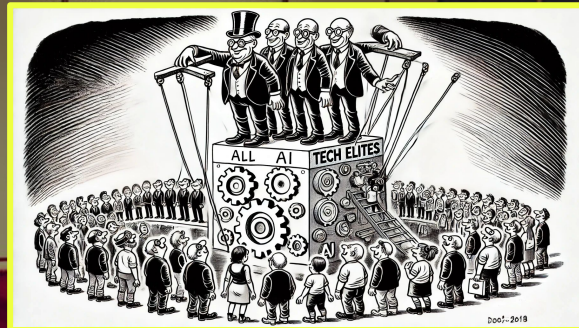
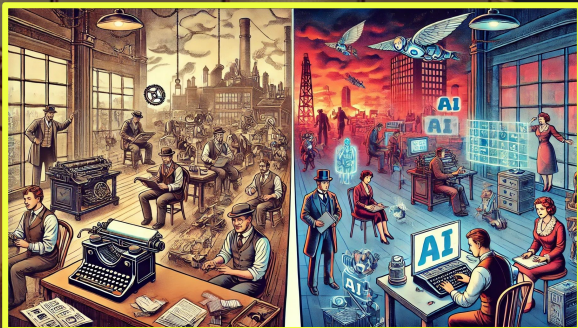


OpenAI's ChatGPT Plus Introduces Advanced Voice Mode





Voice Modality Changes How YOU Interact





~~MY USE CASES~~

YOUR USE CASES



THANK YOU!

agent.bryon.io



Q&A
for
**Racing the Future:
How (and Why!)
Entrepreneurs and
Professionals Must
Engage with AI Today**

***What was the most important thing you
learned tonight?*** (30 sec)

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18 19 20

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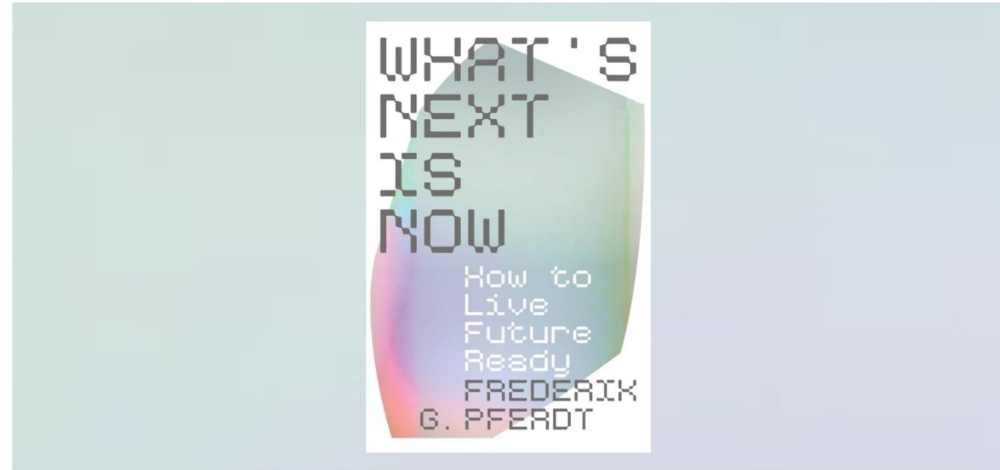
[← Back to All Events](#)

DISCUSSION OF "WHAT'S NEXT IS NOW: HOW TO LIVE FUTURE READY"

Thursday, December 19, 2024

7:15 PM – 8:30 PM

Online



[REGISTER](#)

[AGENDA](#)

[← Back to All Events](#)

TECH TRENDS FOR 2025 (AND BEYOND!)

Tuesday, January 7, 2025

6:15 PM – 7:45 PM

ACC Rio Grande: Building 3000

1218 West Avenue, Austin, TX, 78701, United States



REGISTER

EVENT SUMMARY

Start your professional career off on the right note —with the right insights--by joining the Austin Forum on Technology & Society for a tech event that has become an annual favorite in Austin. On January 7 we present our look ahead at the

AGENDA

5:15-6:15 p.m. Networking
6:15-7:30 p.m. Presentation
7:30-7:45 p.m. Q&A
8:00 p.m. Networking

Join Us for More Great!

Upcoming **presentation** topics include:

- Tech Trends for 2025 (and Beyond!)
- Cybersecurity Threats Now—And What to Do
- Tech and art
- Gaming tech
- More AI
- and much more!!!



Plus:

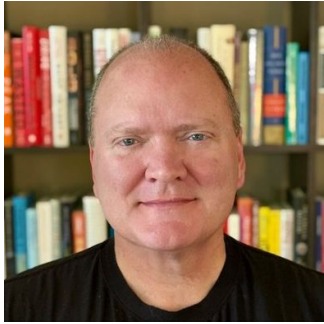
- In-person **meetups & workshops**
- Online **book discussions**
- **Podcasts**

Donate Your Unused Tech

- If you have computers, tablets, or smartphones no longer being used, please help those in need
- Bring your devices to any in-person event, and we'll donate to our worthy charities!



Austin Forum Team!



Jay Boisseau
Executive Director



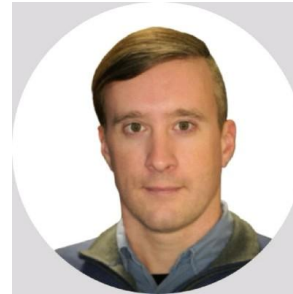
Allison Boisseau
Managing Director



Mary Garza
Web/UX Designer



Gabby Warner
Communications



Chris Ashton
Streaming Support



John Lockman
Podcast Engineer

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- Attend the annual meeting & VIP reception
- Get a nice tax deduction!
- Get cool AF swag
- 100% of your gift goes to executing the Forum



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- Get a tax deduction!
- 100% of your gift goes to executing the Forum
- Listed on our Friends page *forever!*



Join us to learn, share, discuss!!



*Please share the upcoming events with your friends
and colleagues!*

Networking

Network here until 8:15pm, then head to Remedy (3rd & Nueces, 0.8 mi away) if you want to continue conversations! (First drink is on the Forum!)



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ON TECHNOLOGY & SOCIETY

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