Consulting & AI

Prof. Joe O'Mahoney

THE CONSULTANT'S CONSULTANT

But.....

Special Reports > Exclusives

AI Beat Clinicians at Figuring Out Difficult Diagnoses

— GPT-4 may help with diagnoses that have been missed by clinicians, study author says

by Michael DePeau-Wilson, Enterprise & Investigative Writer, MedPage Today
August 14, 2023

bt Business Today

News / TECHNOLOGY / News / GPT-4 outsmarts Wall Street: AI predicts earnings better than human analysts

Feedback

GPT-4 outsmarts Wall Street: AI predicts earnings better than human analysts

The researchers conducted their study by providing GPT-4 with standardised financial statements, carefully stripped of any company names or dates to prevent the model from using prior knowledge

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Research / News / Artificial intelligence beats doctors in accurately assessing eye problems

Research

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Artificial intelligence beats doctors in accurately assessing eye problems

FORBES > INNOVATION > CONSUMER TECH

GPT-4 Beats 90% Of Lawyers Trying To Pass The Bar

John Koetsier Senior Contributor

THE FRANCIS CRICK INSTITUTE

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News & reports

AI beats doctors at predicting heart disease deaths

Home > Exclusive > Artificial Intelligence

ChatGPT-4 outperforms human psychologists in test of social intelligence, study finds

by Eric W. Dolan — April 19, 2024 in Artificial Intelligence

1. What is AI?

Types of AI

1. **LLM (like ChatGPT): read & generate accurate human-like text.**
   LLMs for improved customer support.

2. **Expert Systems which mimic human decision-making using rules & heuristics.**
   Diagnosing cancer from scans.

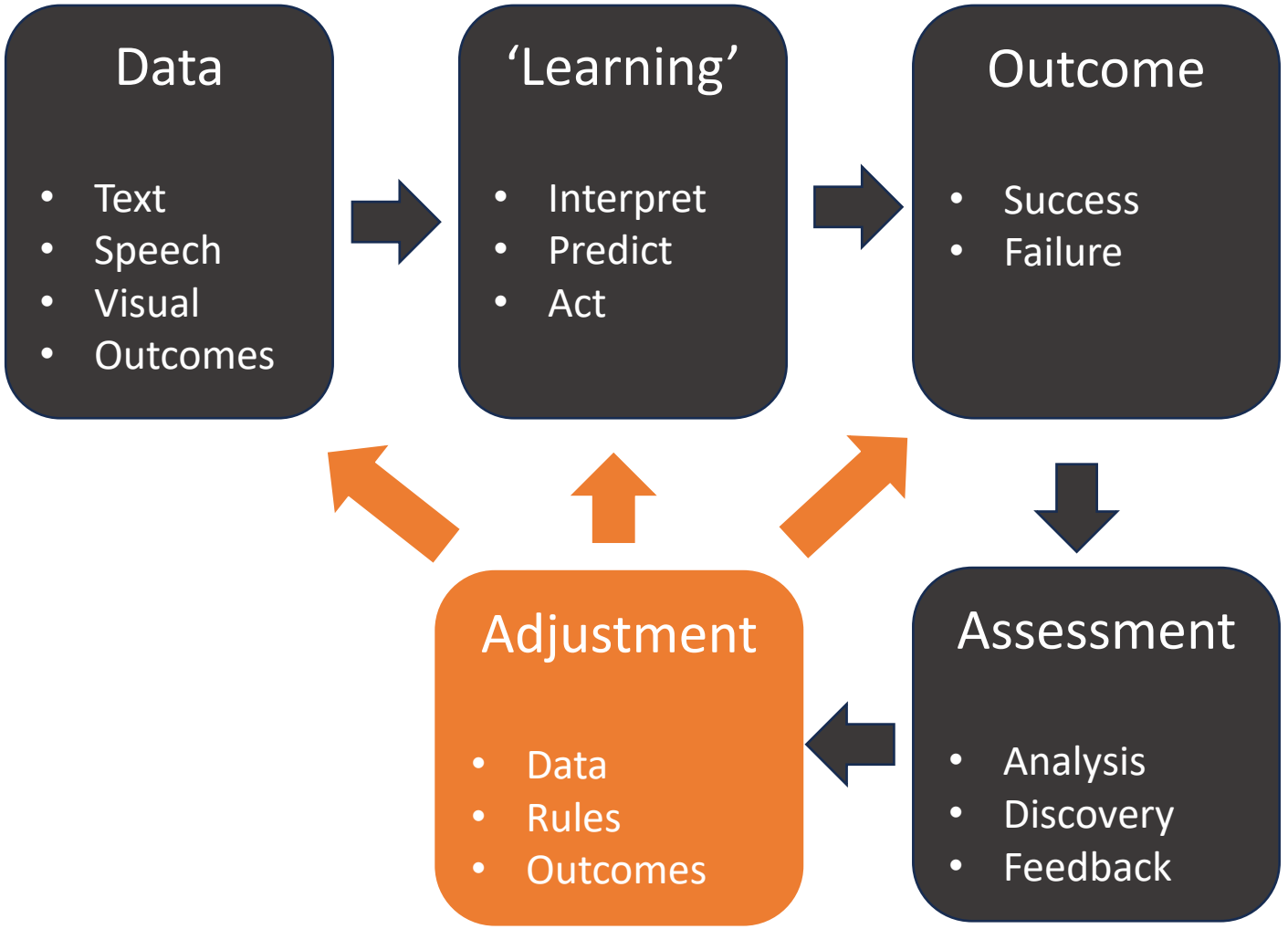
3. **Machine Learning learns from data to make decisions or predictions.**
   American Express to analyse transactions in real-time preventing fraud.

4. **Deep Learning uses artificial neural networks to learn from large, complex datasets.**
   Netflix algorithms for personalized content recommendations.

5. **Computer Vision recognises and 'understands' visual data.**
   Amazon Go tracks customer-selected items and charge accounts automatically.

6. **Natural Language Processing to interpret and analyse text.**
   Expedia uses NLP to analyze customer reviews, gaining insights into service improvements.

AI
architecture



2. What can AI do?

ChatGPT PLUS

Suggest fun activities
for a family of 4 to do indoors on a rainy day

Recommend a dish
to impress a date who's a picky eater

Show me a code snippet
of a website's sticky header

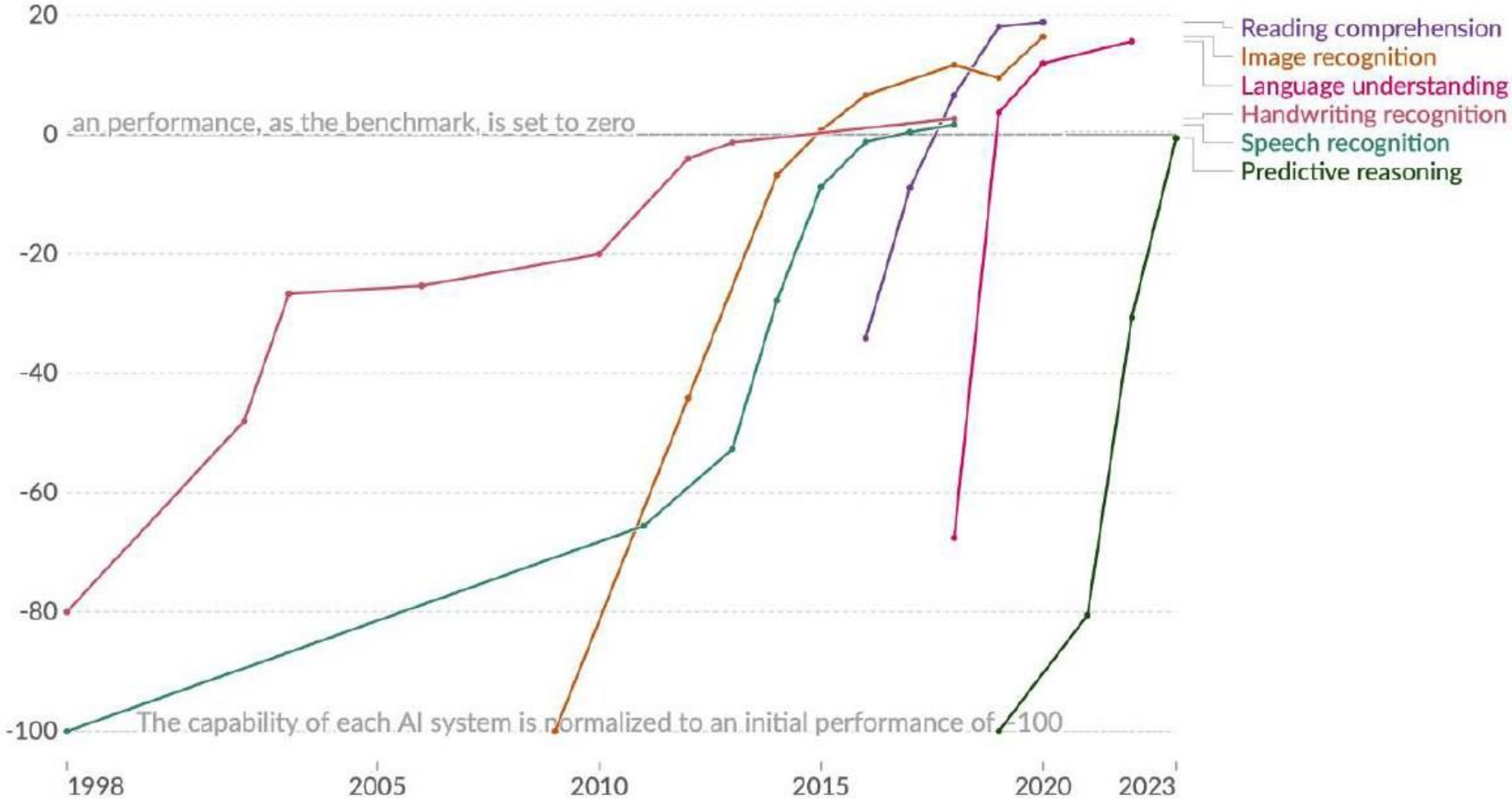
Explain this code:
'"cat config.yaml | awk NF"'

Send a message

Test scores of AI systems on various capabilities relative to human performance

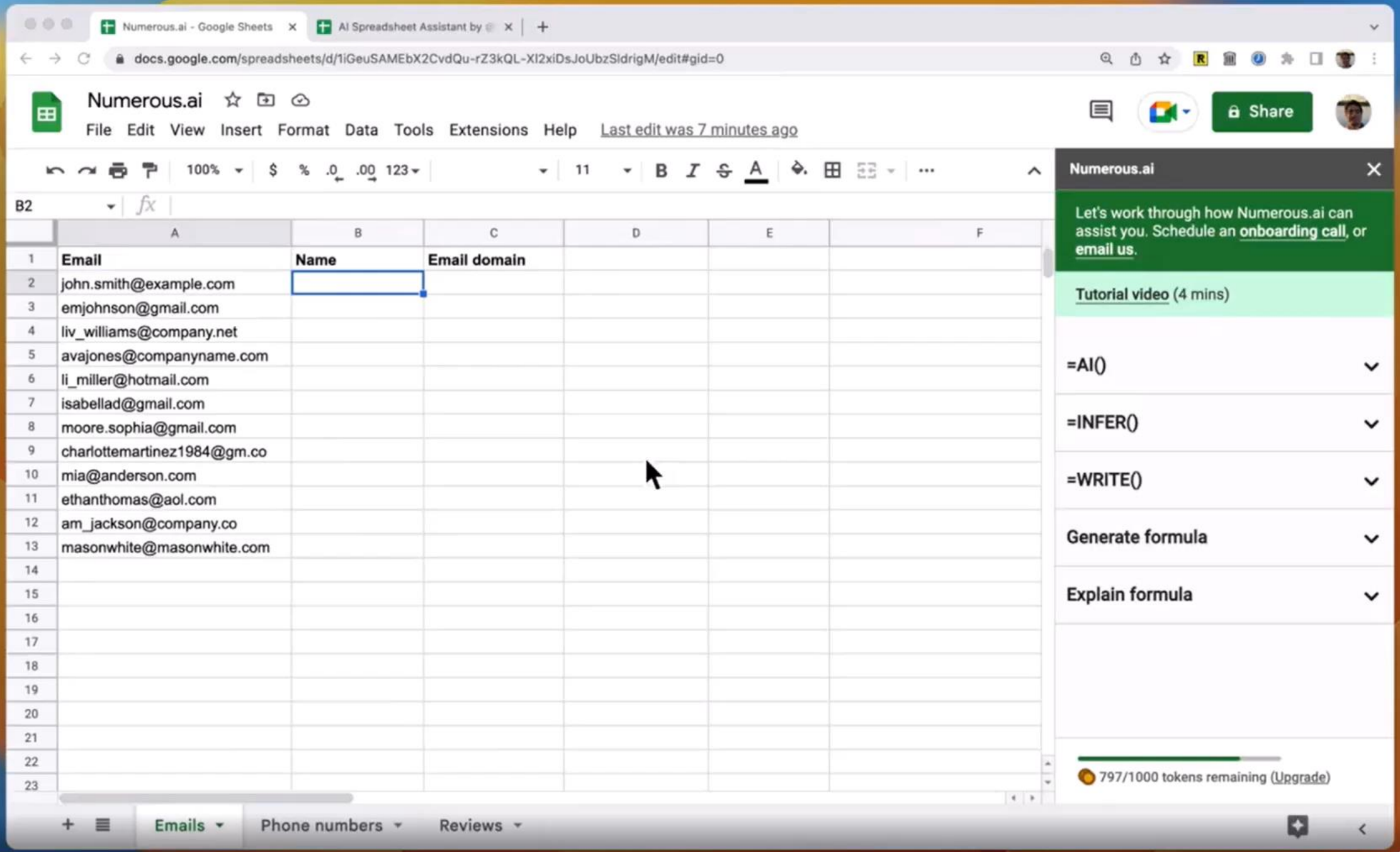
Our World in Data

Within each domain, the initial performance of the AI is set to −100. Human performance is used as a baseline, set to zero. When the AI's performance crosses the zero line, it scored more points than humans.



Data source: Kiela et al. (2023)

OurWorldInData.org/artificial-intelligence | CC BY


Numerous.ai - Google Sheets
AI Spreadsheet Assistant by
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Numerous.ai
File Edit View Insert Format Data Tools Extensions Help
Last edit was 7 minutes ago
Share
B2
Email
Name
Email domain
john.smith@example.com
emjohnson@gmail.com
liv_williams@company.net
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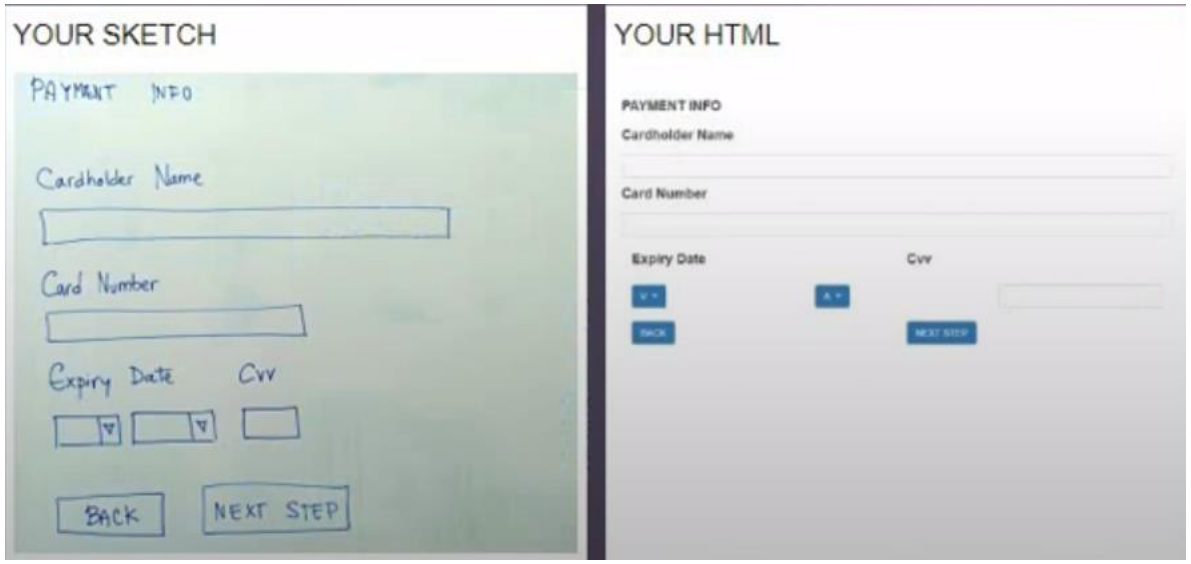
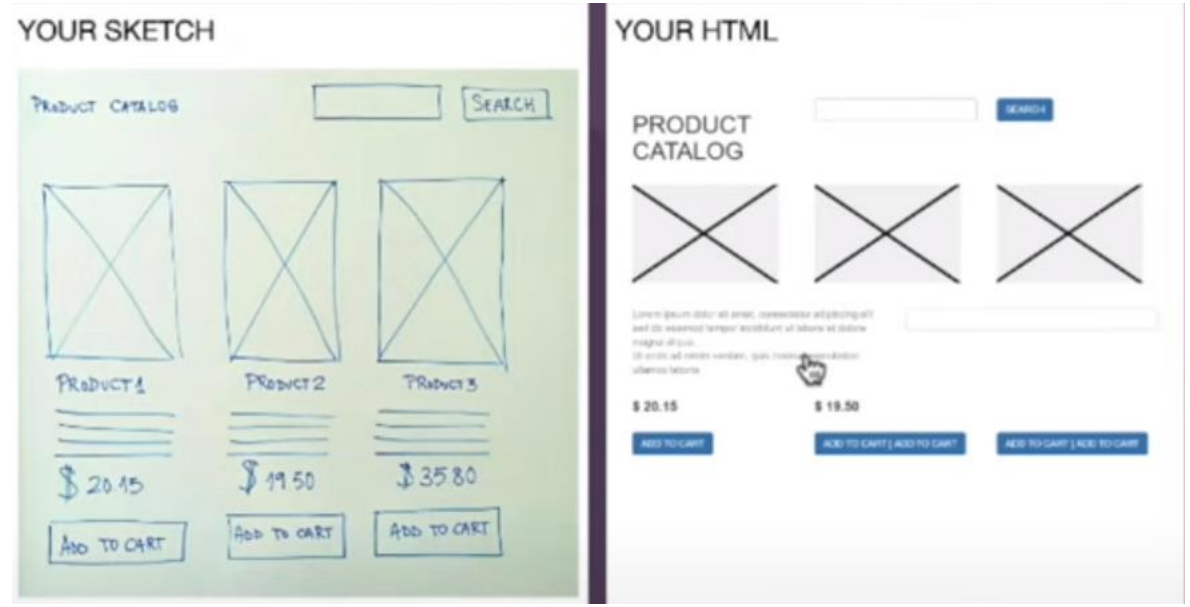
charlottemartinez1984@gm.co
mia@anderson.com
ethanthomas@aol.com
am_jackson@company.co
masonwhite@masonwhite.com
Numerous.ai
Let's work through how Numerous.ai can assist you. Schedule an onboarding call, or email us.
Tutorial video (4 mins)
=AI()
=INFER()
=WRITE()
Generate formula
Explain formula
797/1000 tokens remaining (Upgrade)
Emails
Phone numbers
Reviews
0:00 / 1:40

AI codes.

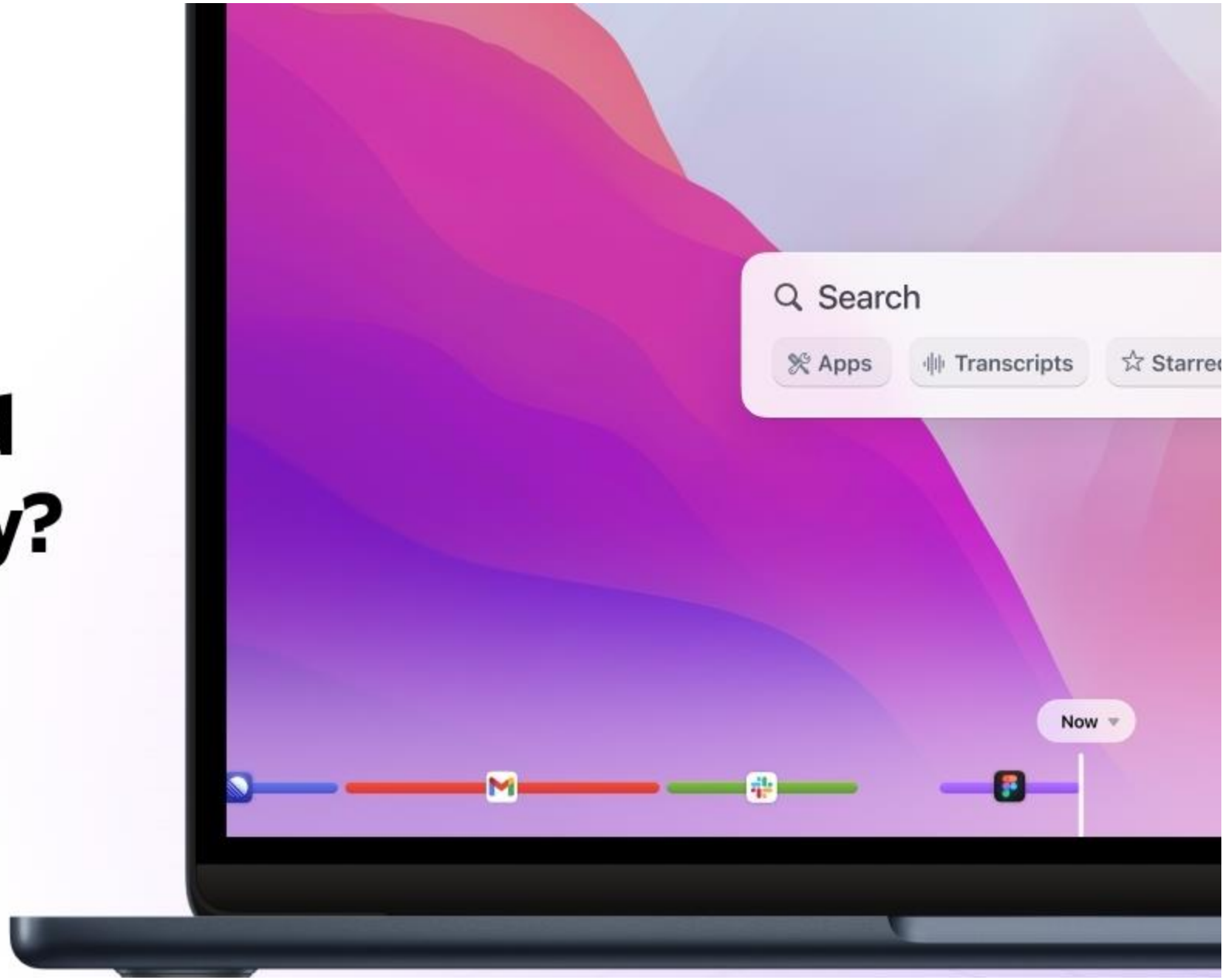
From pictures





Rewind

What if you had perfect memory?



2. What can AI do for business?

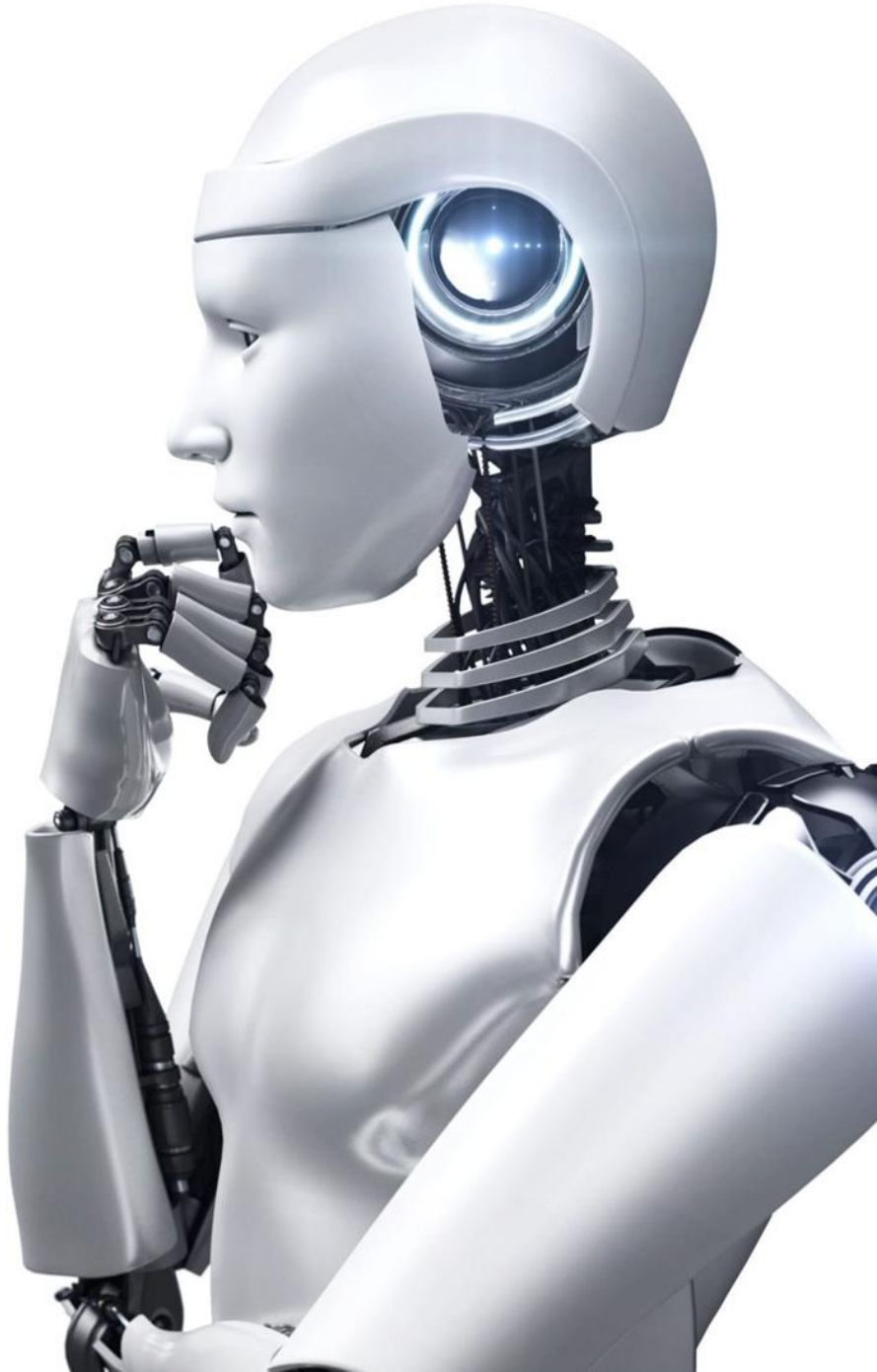
Insights from **research**

- AI is more accurate than doctors
- AI is 9x more empathetic than doctors
- AI beat 99% of students for creativity
- AI makes stories more novel & interesting
- AI created 88% of top business ideas
- Management consultants using AI
    - Finished 12% more tasks
    - Completed tasks 25% faster
    - Produced 40% higher quality

Low hanging fruit

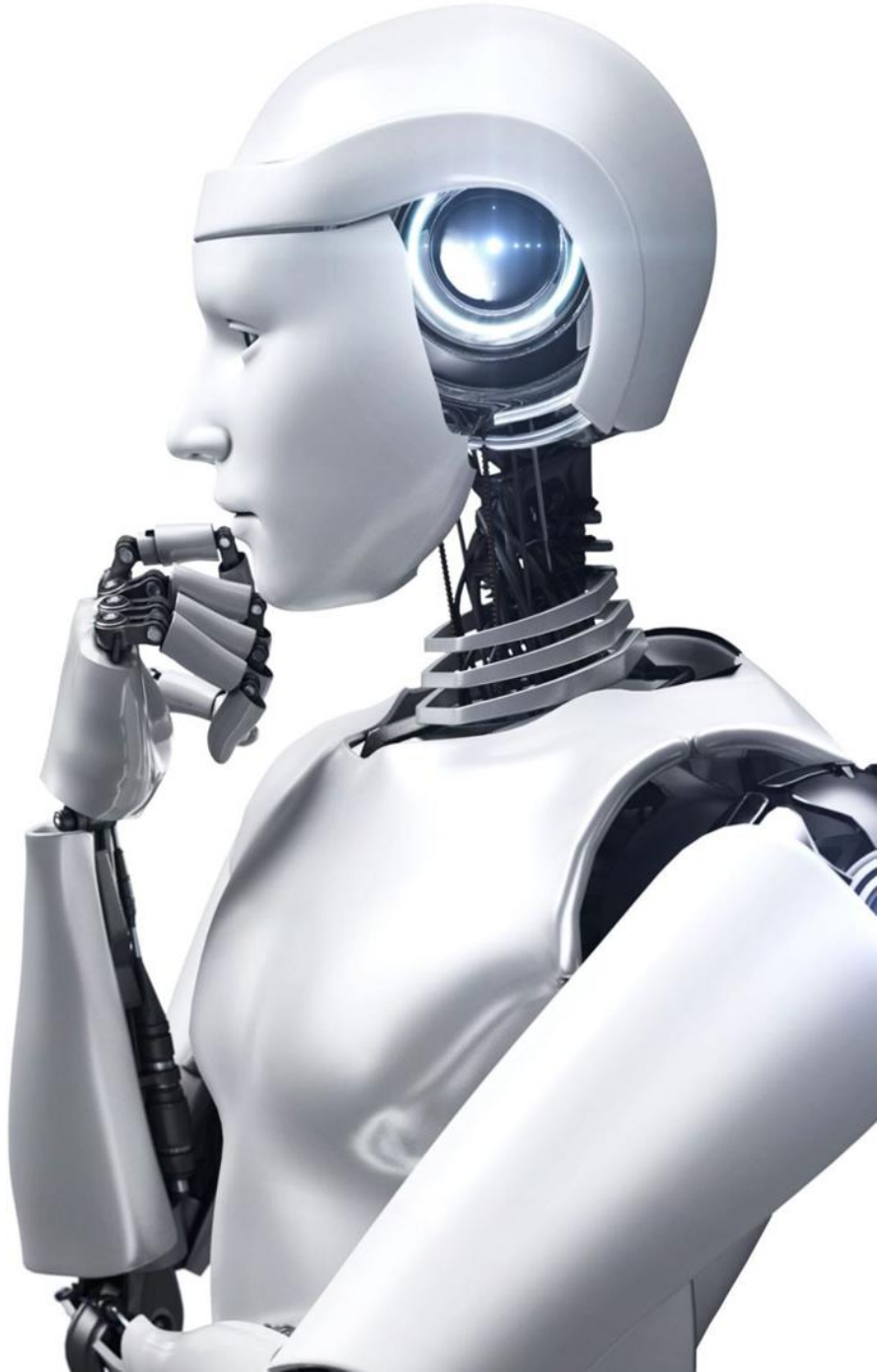
- Conversational assets
  - Call analysis & feedback
  - Chatbot support
  - Trend detection (e.g. complaints; feedback; employees)
  - Compliance

- Content creation
  - Idea generation
  - Content checking (e.g. consistent voice)
  - Content creation
  - Content reuse (audio → image → text → video)



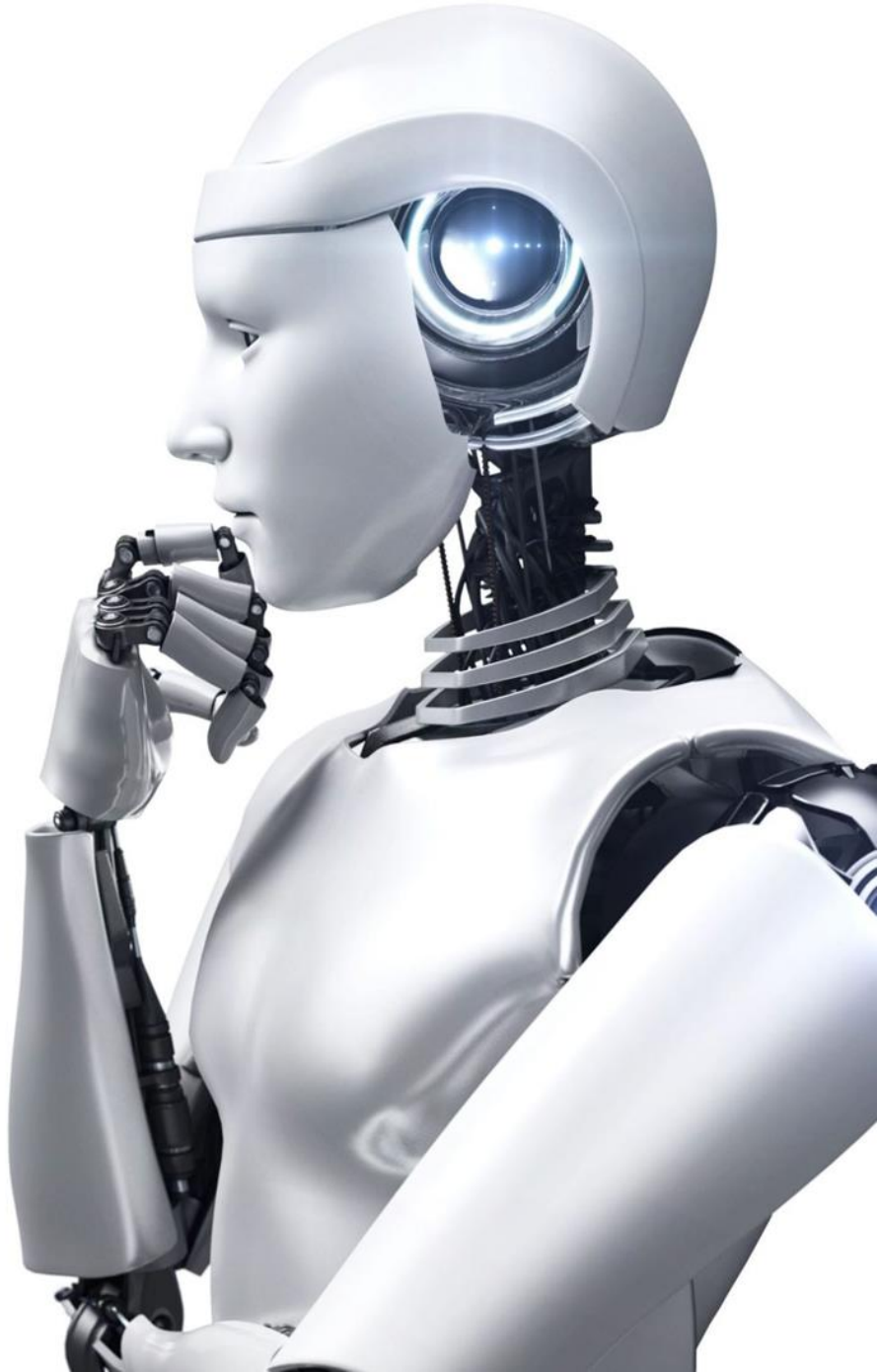
Medium Effort

- AI 3rd party plug-ins & apps
  - Assess the personality of this email recipient and guide me writing an email.
  - Create a blog from a presentation I'm giving on AI.
- Build chatbots for your services
  - Allow customers to ask natural questions
  - Allow employees to find information faster
  - Create a virtual project manager to update clients



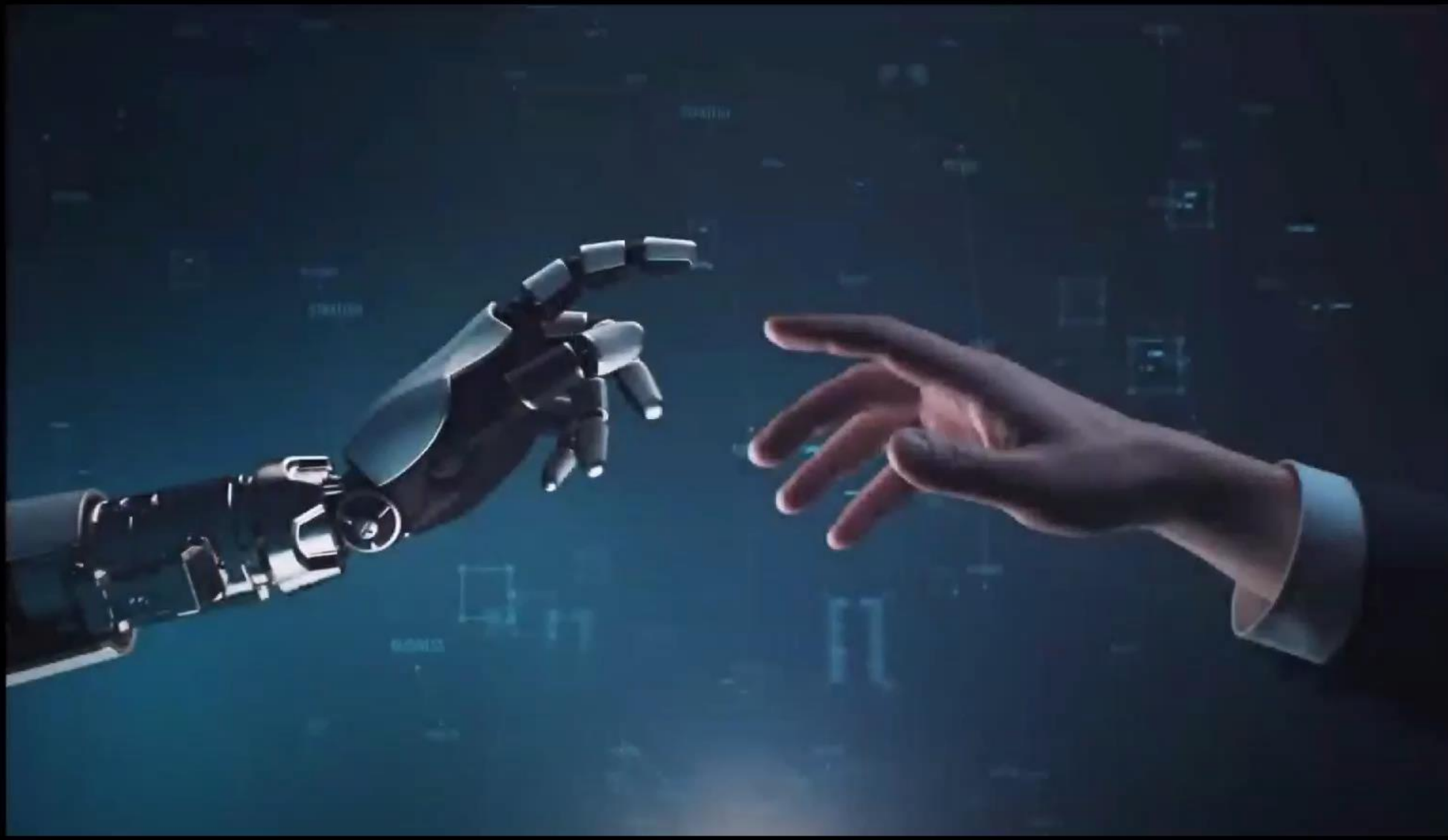
High Effort

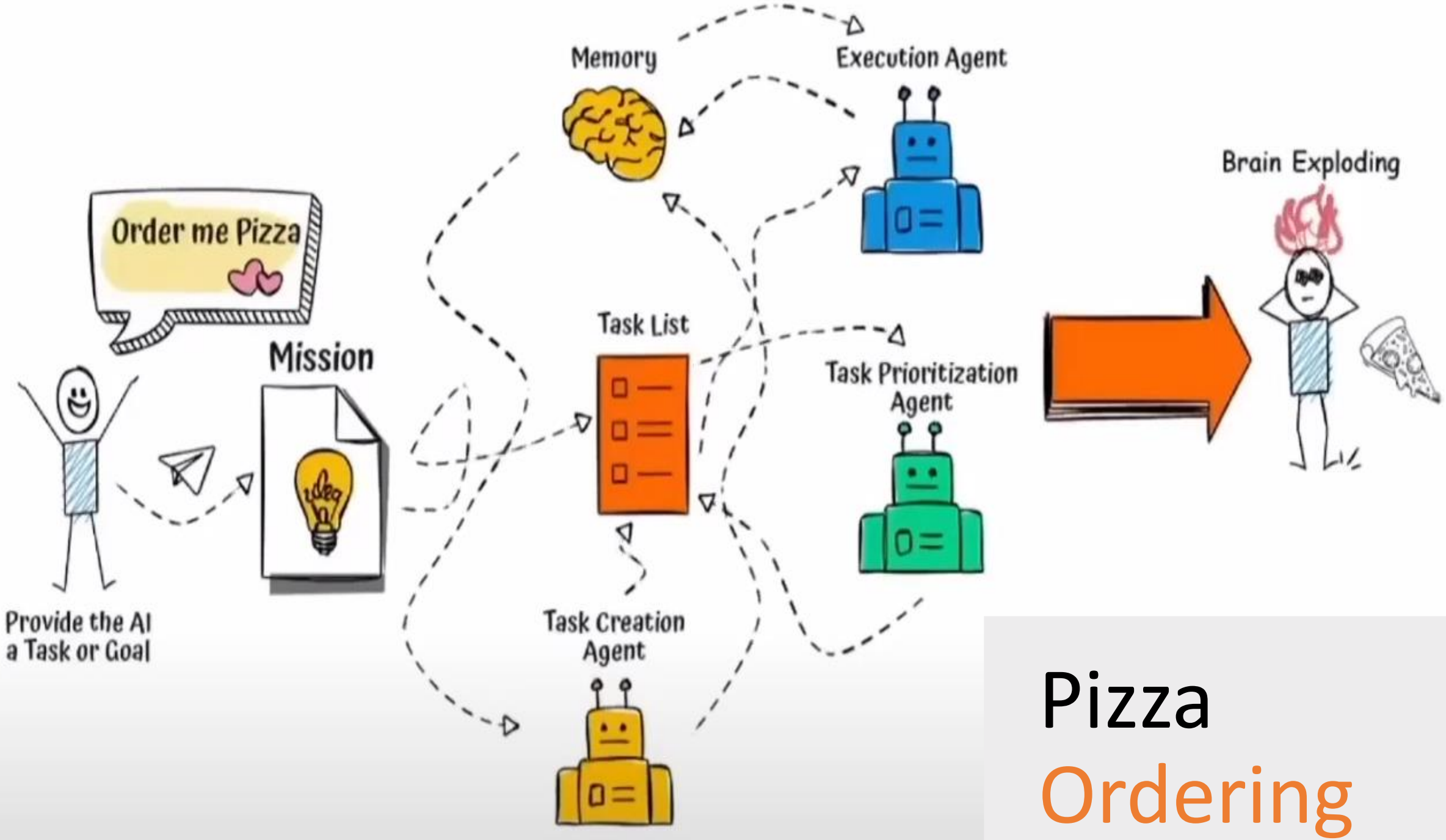
- Create your own LLM
  - Training
  - Off-line AI trained on your own content
  - Secure, confidential
- Bespoke AI Software
  - Agents
  - SaaS / Cloud



AI Agents

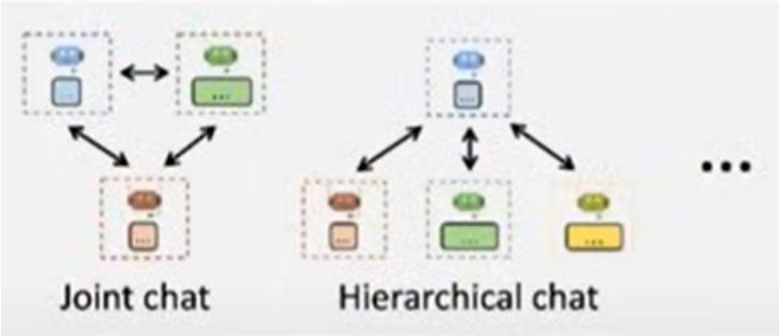
- Role-playing agents in group chat
- Text, voice, image, browser, PC, email etc.
- Pursue goals
- Completes tasks
- Interacts with environment (incl. agents)
- Memory
- No-code





Pizza Ordering

Multi-Agent Conversations



Flexible Conversation Patterns

Agent use cases

- **Build** a website to track small UK planes
  - Product manager, Business analyst, Systems analyst, Coder, Tester, Project manager;
- **Write** a novel about the awakening of AI
  - Researcher; Story Planner; Character Developer; Writer; Editor; Project Manager;
- **Trade** £5k to make me rich from ethical stocks
  - Bank user; stock analyst; trader; project manager; communications agent; ethics agent;

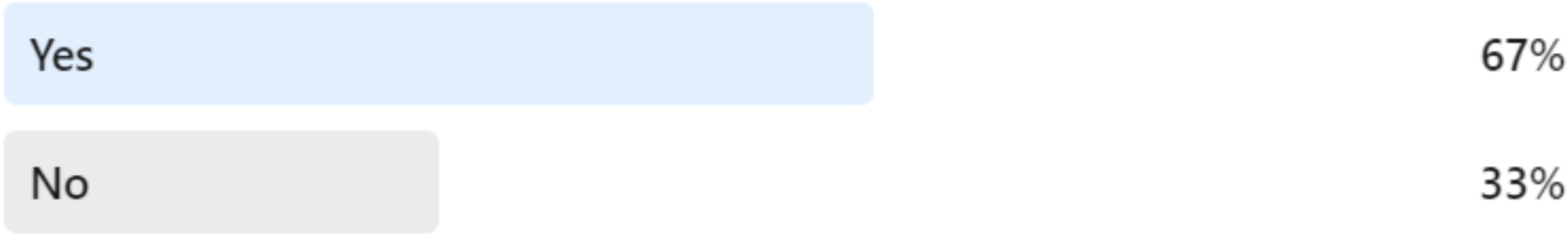
https://www.cassidyai.com/

4. An example

Management Consulting

- **Accenture:** investing $3 billion & employing an additional 80,000 AI employees.
- **KPMG** is buying $2 billion worth MS Cloud and AI services by 2028
- **PwC** is investing $1bn in a "3-year AI roadmap," training 65,000 employees.
- **McKinsey & Co.** trained its own AI ($100m)

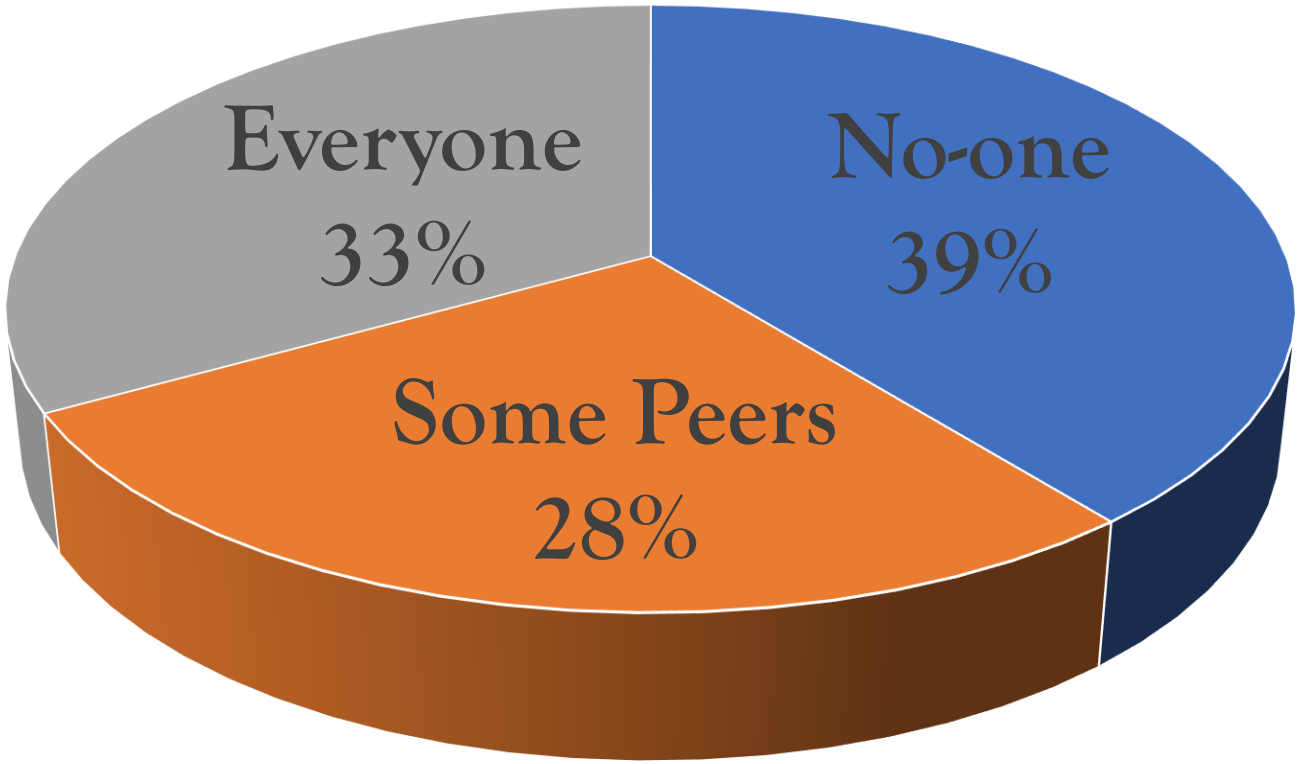
Consultants, do you use AI ?



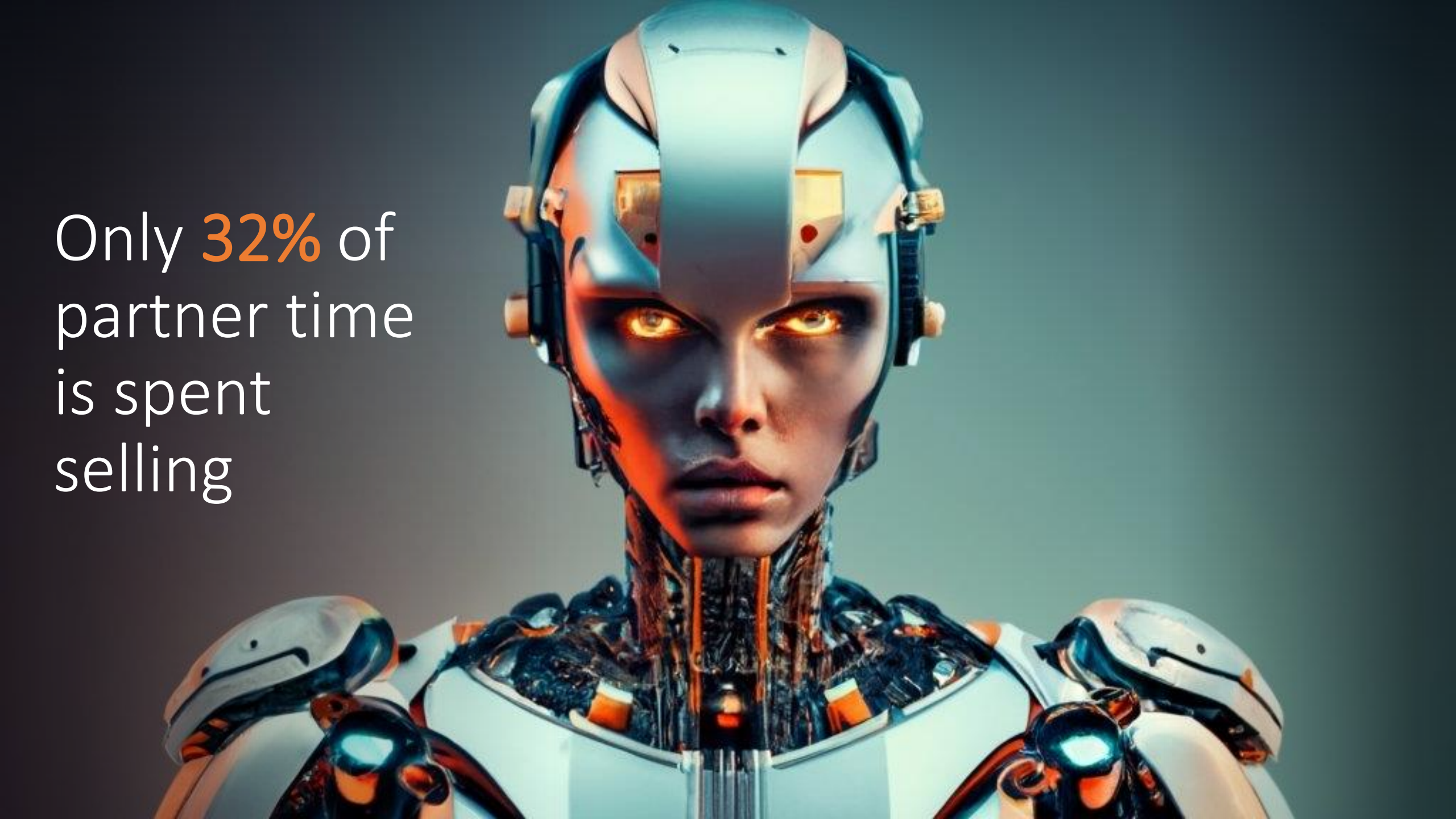
What do you use AI for?

67	To save my own time in producing roughly the same deliverables
15	To increase quality of my delivery to clients or internal stakeholders
2	To develop new services / products
22	Other (specify below)

Who **knows** you're using AI in your consulting job?



Only 32% of partner time is spent selling



Business Development Use Cases for PSFs

Faster, better, cheaper.

- **Identification of leads**
  - Buying triggers (LI Sales Navigator)
  - Buying behaviour (Qlick)
  - Customer segmentation (Peak.ai)
  - Prioritisation (Signum.ai)

- **Content Creation**
  - Content gathering (CrystalReads)
  - Content ideas / targeting (GPT4)
  - Content creation / completion (GPT4)
  - Content repurposing (Veed.io)
  - SEO optimisation (SEO.ai)

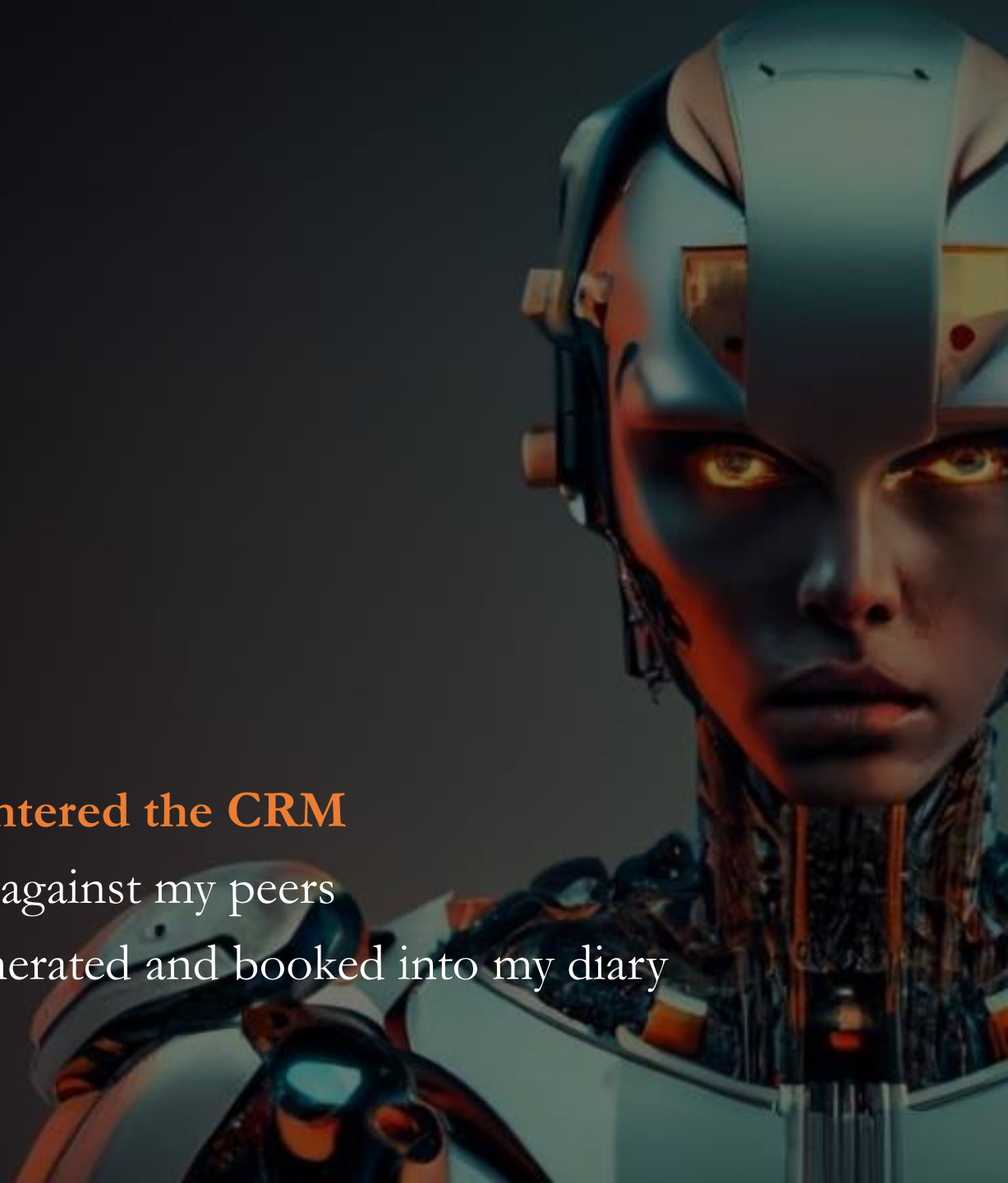
- **Outreach**
  - CRM insights (Creatio)
  - Automation (MeetAlfred)
  - Content (re)creation (Munch)
  - Content personalisation (BHuman)

- **Calls**
  - Simulated training (Alelo)
  - Personality of buyer (crystalknows)
  - Performance analysis (nice.com)
  - CRM updates (https://www.getpilot.ai/)

- **Meetings**
  - Meeting booking (Calendly)
  - Note-taking & actions (Firefly)
  - Slide generation (MagicSlides)
  - Analysis & feedback (Revenue.io)

- **Negotiation**
  - Pricing optimisation (PriceFX)
  - Negotiation training (humantic.ai)
  - Contract creation, review & management (GPT4)

- My prospects have **pre-identified.**
- My prospects have been **converted to leads.**
- My leads have been **prioritised**.
- My first lead of the day is **analysed**:
  - personality
  - history
  - socioeconomic indicators
- My script is **pre-populated**
- **I make the call**
- The call is recorded, transcribed & highlights **entered the CRM**
- My sales **performance is analysed** and ranked against my peers
- **Training** is automatically **personalised** and generated and booked into my diary
- My next call is **queued**



4. Thinking about AI

Main Questions

- What is possible?
- What works well?
- What is the business value vs. cost?
- What data do we / should we have?
- How tech-ready are we?
- What are the risks?
- What are the risks of doing nothing?

Risks

—

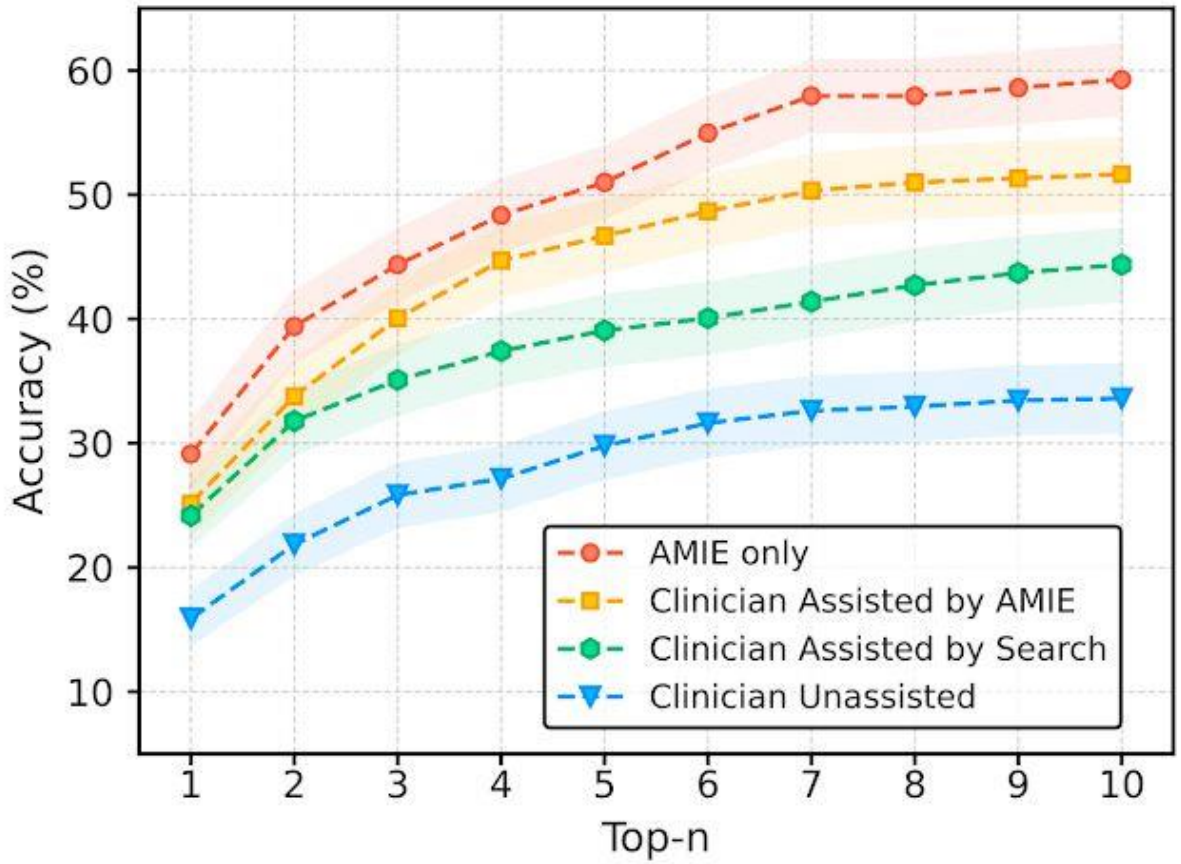
- Privacy
- **Hallucination** & bias
- Transparency & **accountability**
- **Jobs** & Over-dependency

5. Can AI give Professional Advice?

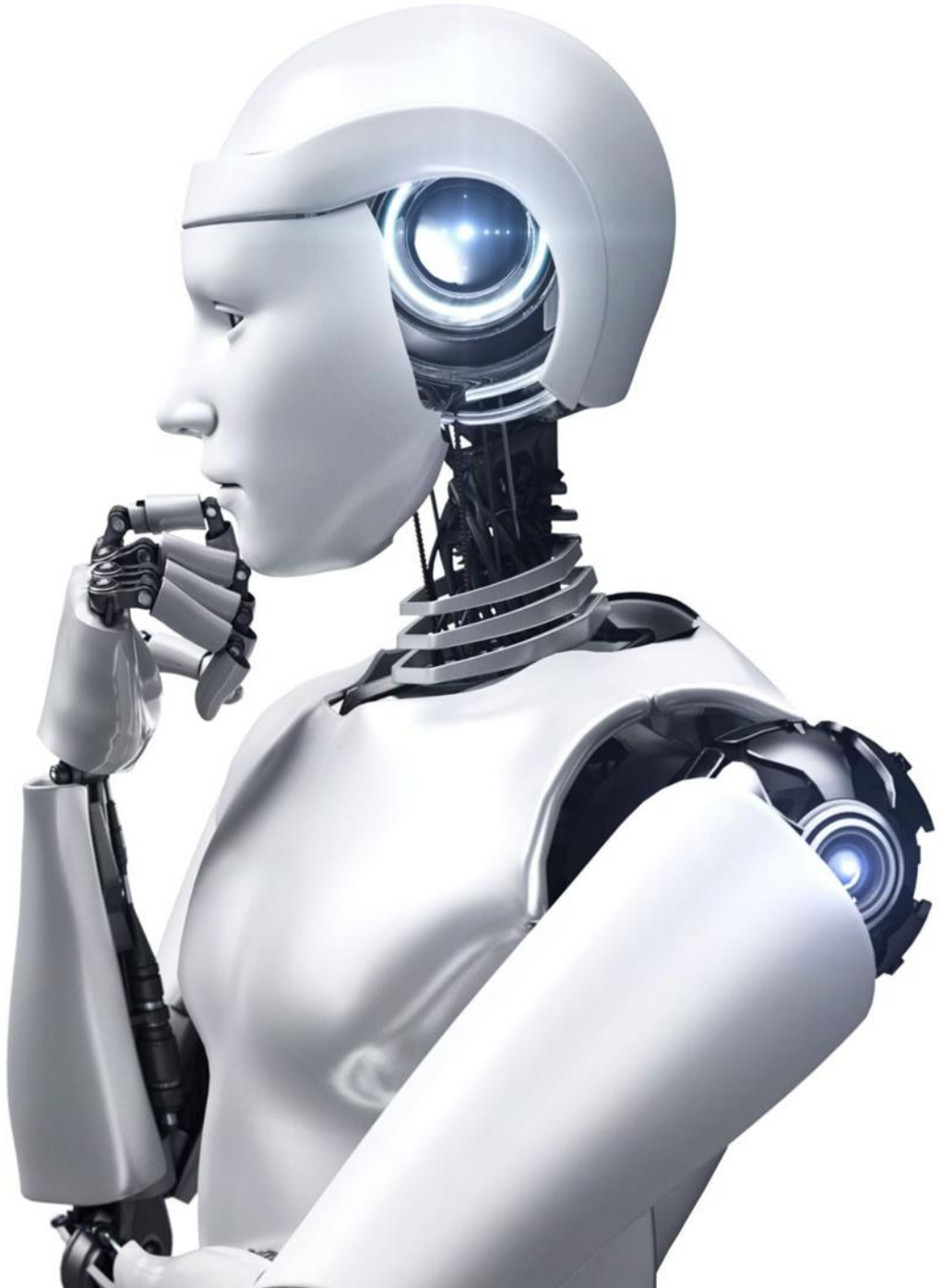
It Already Is

—

- Law
- Medicine



My Favourite AI Apps



Dynamic snapshots	www.plusdocs.com
Slides	web.sendsteps.com
Sketches → Dashboards	mokkup.ai
Create a company chatbot	getcody.ai
App build	uizard.io
Conversational data analysis	getluminal.com
Dynamic documents	nanonets.com
Build automations	cheatlayer.com
Use tables for GPT	tableconvert.com
Note taker and summaries	fireflies.ai
Translation for BD	clonedub.com
For coding	Github co-pilot

Thank
you
joe@joeomahoney.com

Follow-up

- List of AI agents: https://github.com/e2b-dev/awesome-ai-agents#open_hands-open-source-projects
- List of the best LLMs: https://huggingface.co/models
- Create an agent: https://agentgpt.reworkd.ai/