

Navigating the Future: Data and AI in Home-Based Care



Welcome

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CARECONNECT

Do you remember your first prompt?

✓ November 20, 2022



Welcome to ChatGPT

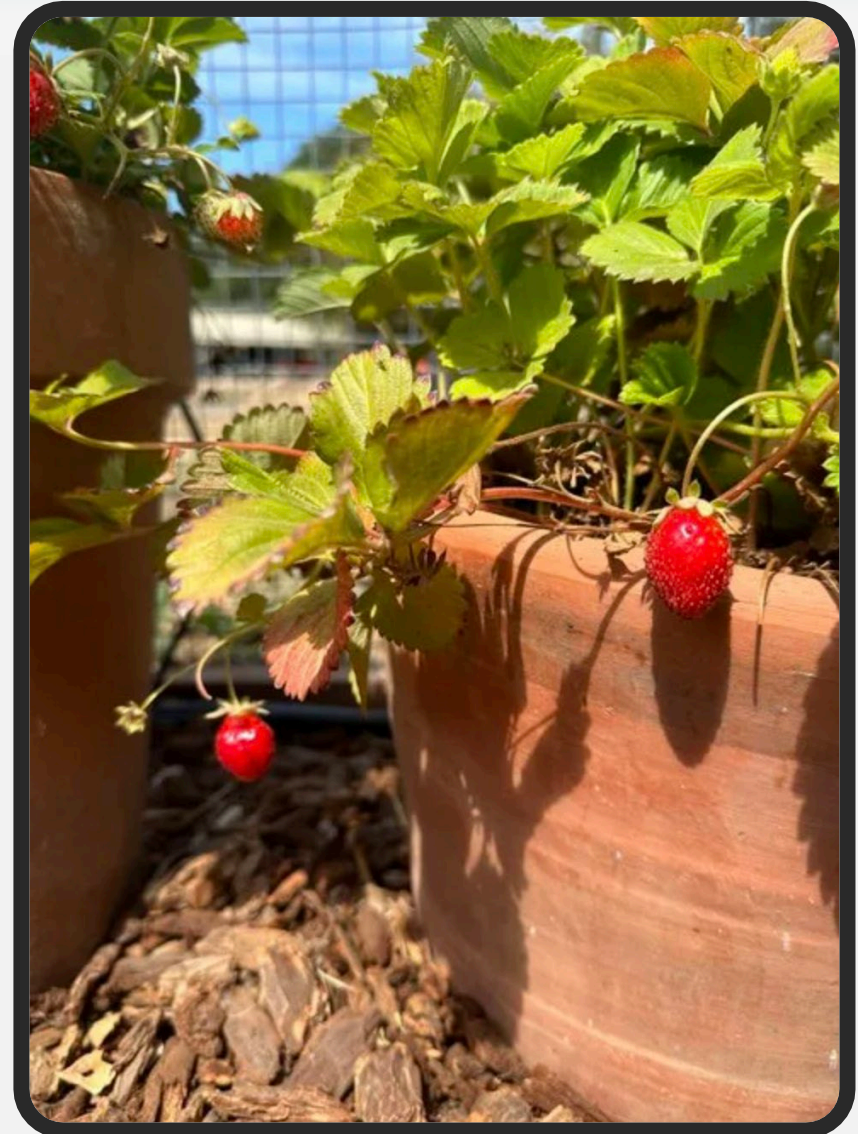
Log in with your OpenAI account to continue

Log in

Sign up

GEN AI IS NOT SUITABLE FOR EVERYTHING

- ✓ Not good at math
- ✓ Not built for complex reasoning
- ✓ Not cheap
- ✓ Not eco-friendly



LLMS ARE GREAT AT SUMMARIZING

- ✓ Summarize these progress notes

The patient has been experiencing headaches and fatigue for the past month and hasn't seen much improvement despite using over-the-counter pain medication. She is interested in scheduling an appointment with a doctor to explore other treatment options. Additionally, she reported feeling tired, ate some dates, and then went to bed but experienced hip pain.

LLMs are great at translating

Layla

Here's a summary of the progress notes:

The patient has been experiencing headaches and fatigue for the past month and hasn't seen much improvement despite using over-the-counter pain medication. She wants to schedule an appointment with the doctor to discuss other treatment options. Additionally, she reported feeling tired, ate some dates, went to bed, but complained of hip pain.

6:40
PM



6:59 PM

Layla can you translate that summary to Spanish?

Layla

Aquí tienes un resumen de las notas de progreso en español:

La paciente ha estado experimentando dolores de cabeza y fatiga durante el último mes y no ha visto mucha mejoría a pesar de usar medicamentos para el dolor de venta libre. Quiere programar una cita con el médico para discutir otras opciones de



LLMs are great at retrieving information and generating responses

- ✓ Retrieval Augmented Generation

6:32 PM

Is it ok to take Tylenol and Metformin at same time?

Layla

Generally, there are no known significant interactions between Tylenol (acetaminophen) and Metformin. However, individual health conditions and other medications you might be taking could affect this.

6:32 PM

Please consult your healthcare provider or pharmacist to get personalized advice based on your specific health situation.



LLMs are great at extracting structured information

Shower routine completed. Helped client get dressed. We didn't help with the bath as **the client fell yesterday morning and his coccyx area is sore.** **There does not appear to be any broken bones** and the client is able to walk slowly but more slowly than usual.

```
1 [
2   {"fall": True, "confidence": .9354},
3   {"pain_mention": True, "confidence": .8903},
4   {"fracture": False, "confidence": .1245},
5   {"body_part": ["coccyx area", "coccyx"]},
6   {"routine_care_completed": True, "confidence": .9123}
7 ]
```



Brian Lewis ²

Aug 16, 2024, 2:58 AM

The patient has called twice in the past week for shortness of breath and chest pain. She has a history of coronary artery disease, diabetes and high blood pressure. She takes medication for these conditions. She lives alone and has no nearby family or support. Her daughter is out of town and unable to provide...

Emergency

Employee

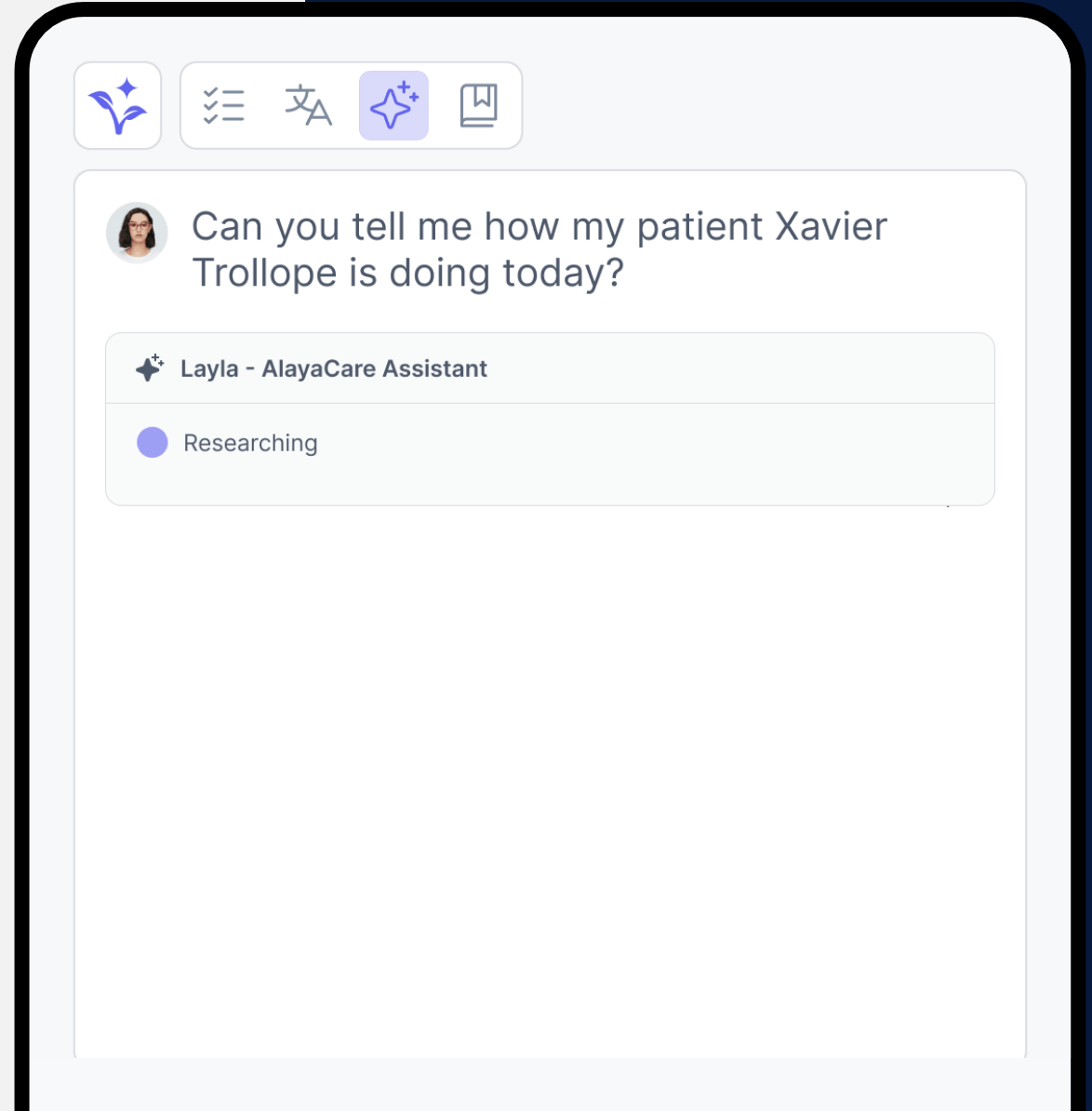
Tyler Jensen

Note Type

General (Client Note)

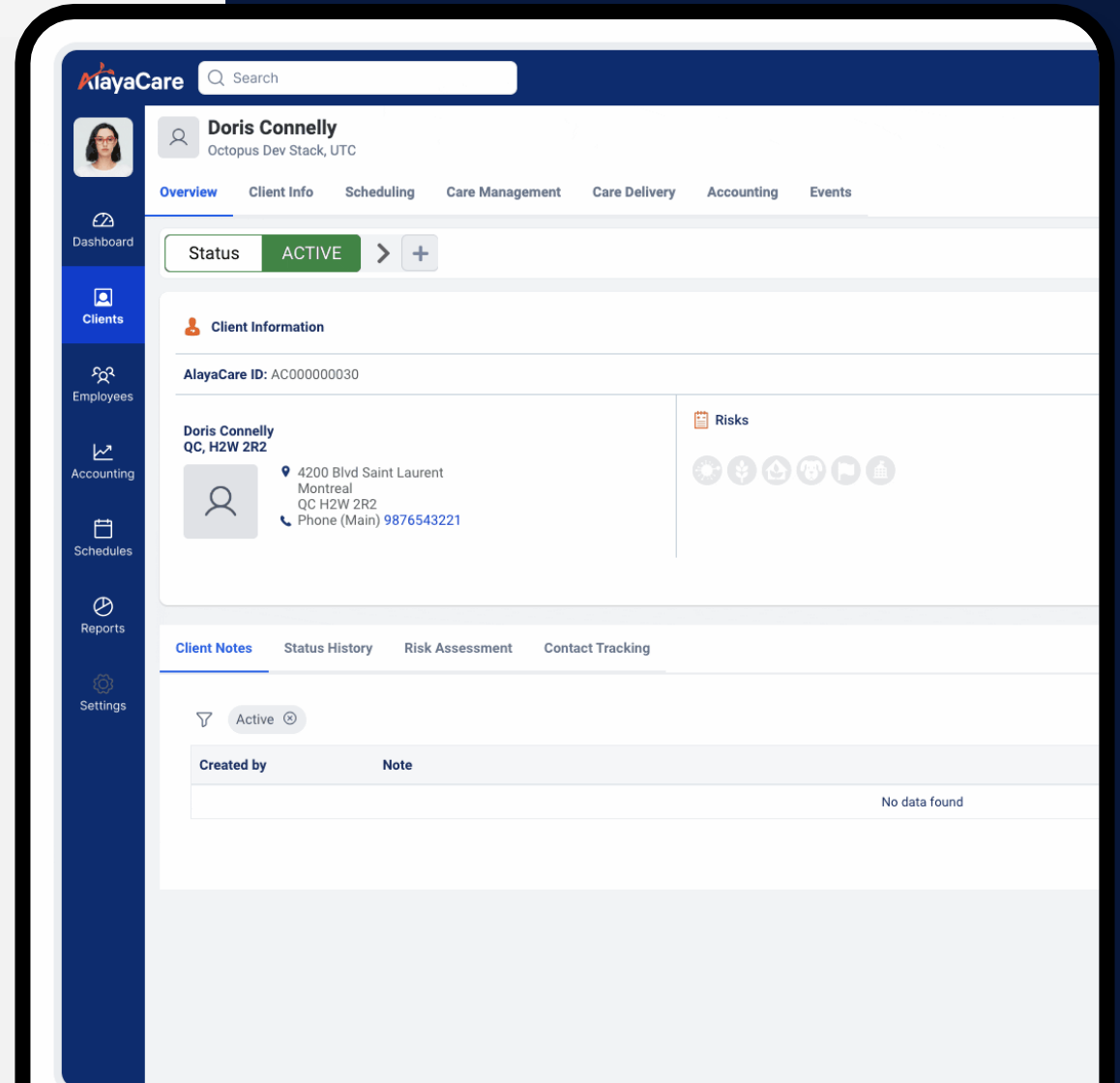
Chat assistants

Feels like an interaction with one agent but there is a team of agents collaborating to access data and execute tasks (agentic workflows)



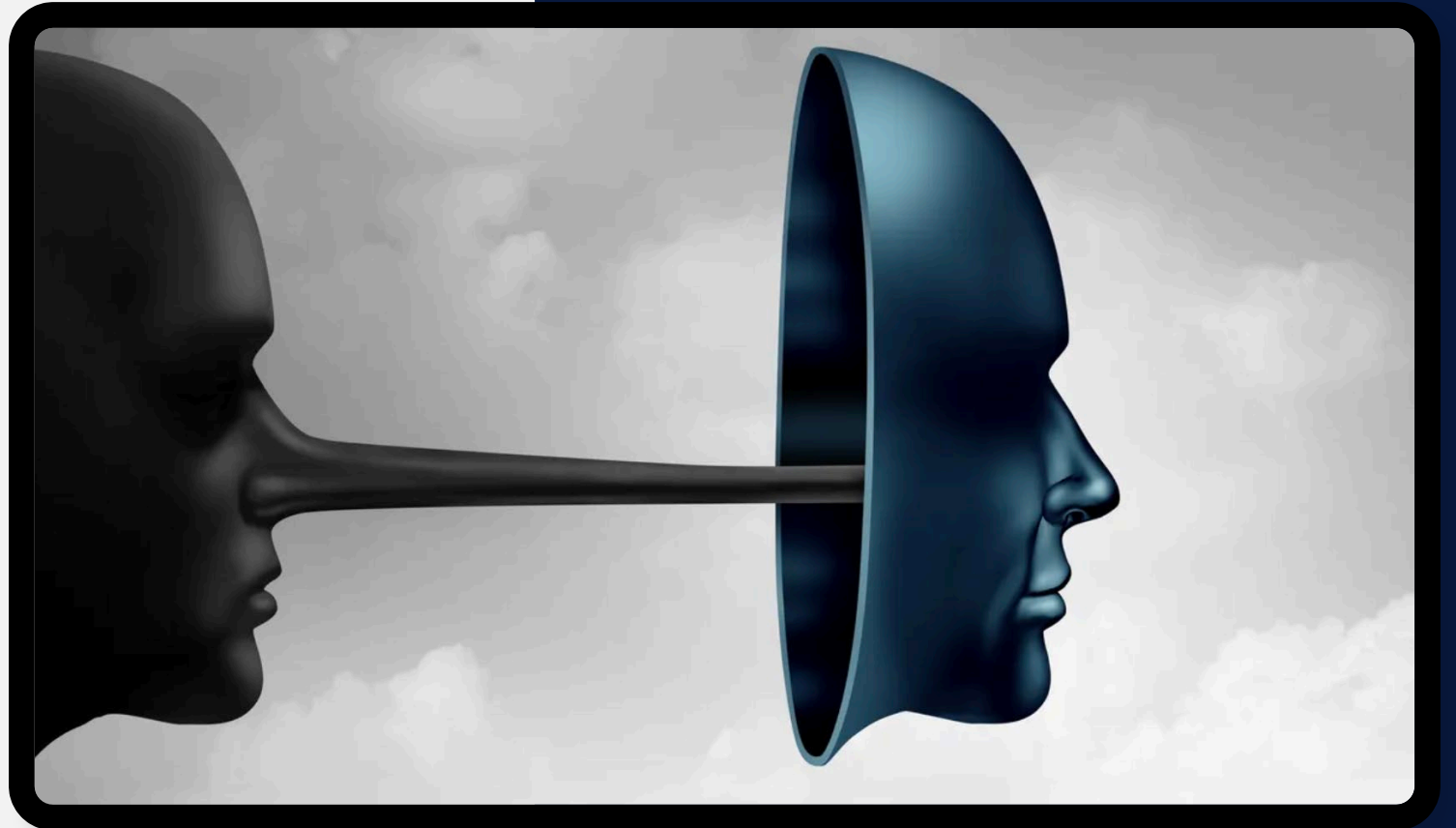
In-app integration

- ✓ Adding generative AI capabilities seamlessly within an application
- ✓ More narrow and defined uses cases that are closer to the UI and workflows



Assistants make surprising and amusing mistakes

- ✓ Prompt engineering
- ✓ Guardrails
- ✓ Fact checking
- ✓ RAG



Gen AI is but one branch of AI technology

Use Case Families	Common AI Techniques					
	Generative Models	Non-Generative ML	Optimisation	Simulation	Rules	Graphs
Forecasting	Low	High	Low	High	Medium	Low
Planning	Low	Low	High	Medium	Medium	High
Decision Intelligence	Low	Medium	High	High	High	Medium
Autonomous System	Low	Medium	High	Medium	Medium	Low
Segmentation	Medium	High	Low	Low	High	High
Recommender	Medium	High	Medium	Low	Medium	High
Perception	Medium	High	Low	Low	Low	Low
Intelligent Automation	Medium	High	Low	Low	High	Medium
Anomaly Detection	Medium	High	Low	Medium	Medium	High
Content Generation	High	Low	Low	High	Low	Low
Chatbots	High	High	Low	Low	Medium	High
Knowledge Discovery	High	Medium	Low	Low	Medium	High

AI as a field, has been doing wonderful things in health over the past decade.

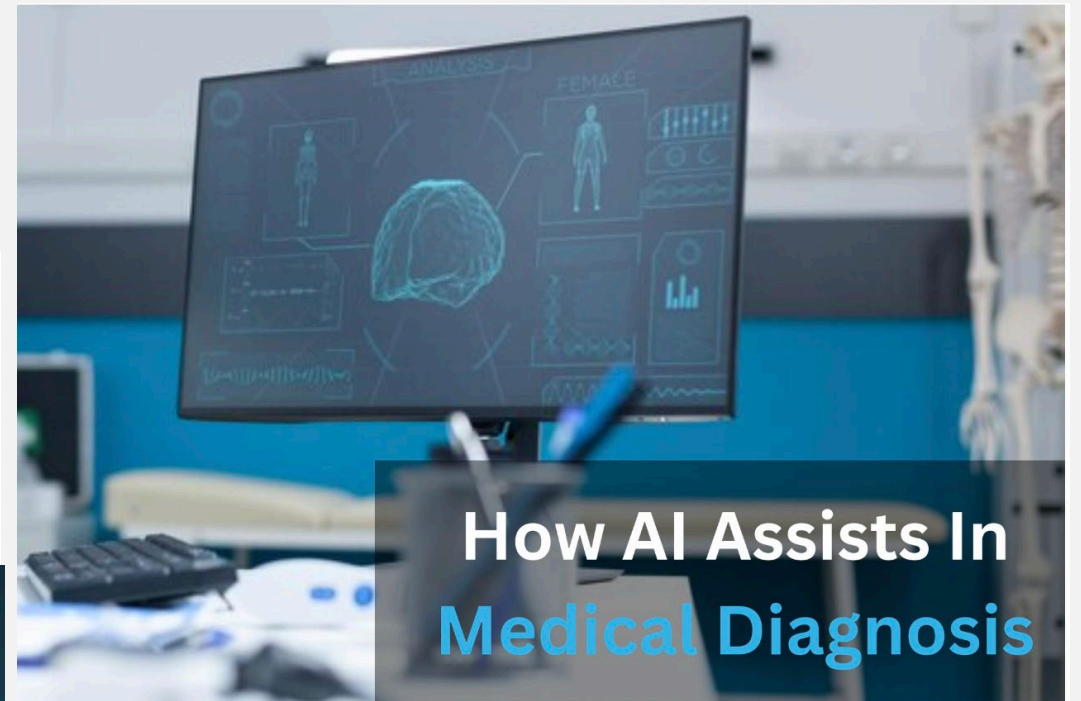
North Carolina Hospital System Reduces Sepsis Cases Using Predictive Analytics

Published on April 29, 2024

Predicting Hospitalization Risk Among Home Care Residents in the United Kingdom: Development and Validation of a Machine Learning-Based Predictive Model

May 2024 · Home Health Care Management & Practice

AI-powered oncology operations



AI SCRIBE

- ✓ Complete accurate, compliant routine visit documentation, leveraging generative AI to do the heavy lifting
- ✓ Ambient listening during the visit or when commuting in the the field



Talk to your data, tell it what to build

The screenshot displays a Looker dashboard for 'Cymbal Superstore' with a 'Sales and Profit Report'. The dashboard includes a summary section for 'Sales and Profit Across Products' and a table for 'Total Sales per Category'. On the right, a 'Duet AI in Looker' chat interface is open, featuring a colorful logo and a 'Welcome to Duet AI in Looker' message. The chat interface includes a 'Data' sidebar, a 'Filter bar', and an 'Ask a question' input field. At the bottom of the chat, it indicates '3 data sources ready for use'.

Sales and Profit Report

Cymbal Superstore

Select date range

Sales and Profit Across Products

Total Sales	12.9M	Total Profit	895.1K	Total # of Skus	29.1K	Average Profit	\$31	Average Cost	\$28
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Total Sales per Category

Category	Sales
1. Outerwear & Coats	207,244.21
2. Jeans	114,508.58
3. Sweaters	130,829.67
4. Swim	100,952.58
5. Fashion Hoodies & Sweat...	190,806.5
6. Suits & Sport Coats	93,524.6
7. Sleep & Lounge	87,146.44
8. Shorts	85,783.9

Duet AI in Looker

Welcome to Duet AI in Looker

Boost your efficiency with an AI-collaborator that provides help where you need it

Duet AI in Looker is ready to search: **Products, Orders, Order Items**. To verify that your data sources are searchable, view their status.

[View status](#)

Ask a question

3 data sources ready for use [View status](#)

Do not underestimate the change management required

Concerns reported at the creation of this Note

- × Medication Non-Adherence
- × Infections
- × Worsening Conditions
- × Emergency

Add a Concern

Covid-19

Cancel Update

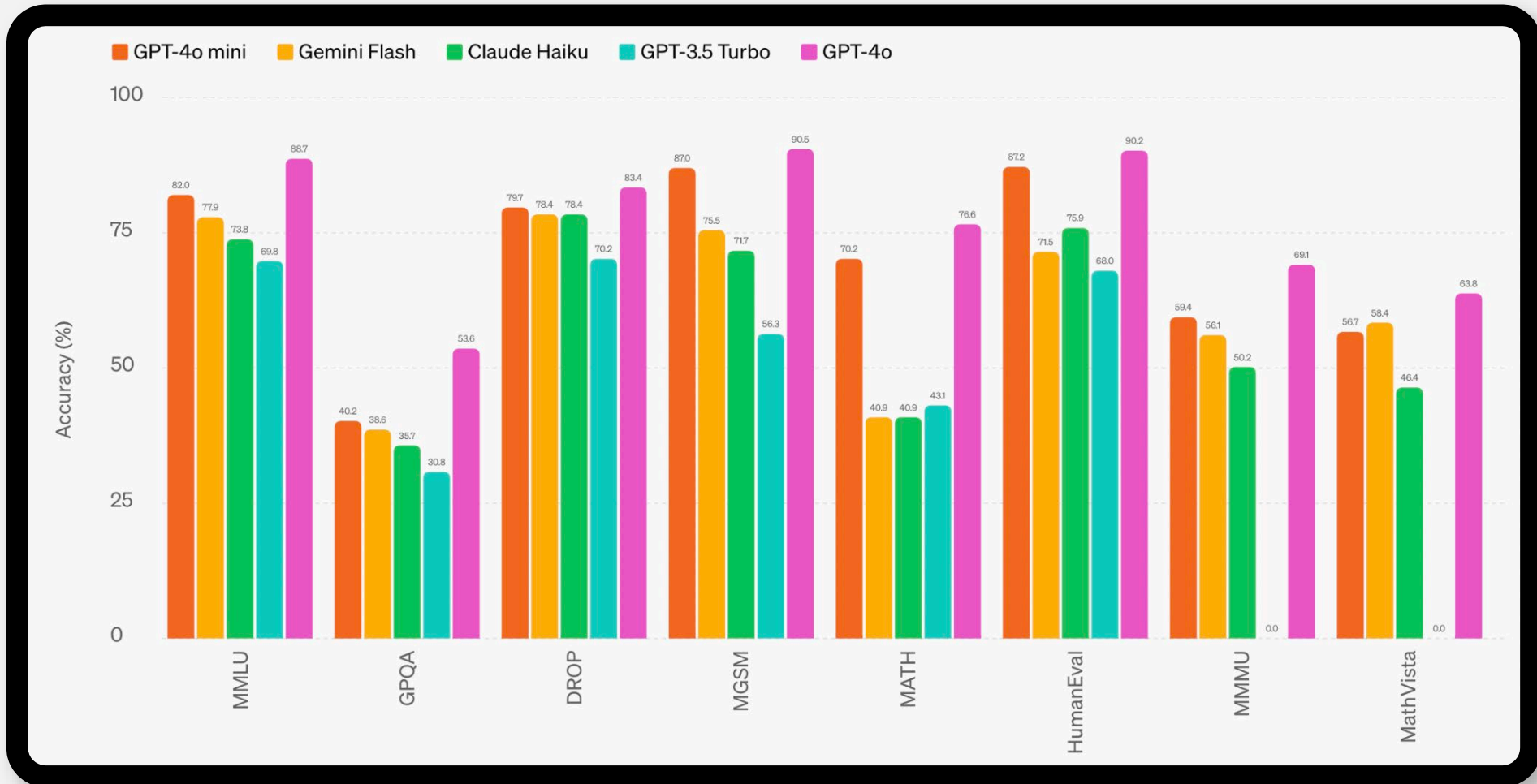
Add your Review:

06-12-2024 Kostya Almeida 10:30 AM 240min No Required John Snow Ben Porter Donald Duck

Employee	Job Title	Continuity	Seniority	Skills	Availability	Current Work Hours	
<input checked="" type="radio"/> > Ben Porter	<i>i</i> Nurse	51%		1/1	77/77	40 16.33 35	Assign
<input type="radio"/> > John Snow	<i>i</i>	0%		0/1	77/77	40 1.75 35	Assign
<input type="radio"/> > Donald Duck	<i>i</i>	0%		0/1	0/77	40 0 35	Assign

Find 3 more employees Send Offers to All

MOVE OVER LLMS. SMALL AI MODELS ARE THE NEXT BIG THING







Thank You

