Appen Limited
Level 6, 9 Help Street
Chatswood NSW 2067

Tel: 02 9468 6300
www.appen.com
ACN: 138 878 298

ASX ANNOUNCEMENT
26 May 2023

2023 Investor Technology Day - Presentation

Appen Limited (ASX: APX) provides the attached presentation for the Investor Technology Day being held today from 2.00pm to 4.00pm AEST.

A live webcast (audio with slides) can be accessed via the following link: Webcast - Registration (openbriefing.com)

Authorised for release by Mr Armughan Ahmad, Chief Executive Office, President and Managing Director of Appen Limited.

Please contact for more information:

Rosalie Duff
Head of Investor Relations
+61 421 611 932
rduff@appen.com
www.appen.com/investors

About Appen

Appen is the global leader in data for the AI Lifecycle. With over 25 years of experience in data sourcing, data annotation, and model evaluation by humans, we enable organisations to launch the world's most innovative artificial intelligence systems.

Our expertise includes a global crowd of more than 1 million skilled contractors who speak over 235 languages, in over 70,000 locations and 170 countries, and the industry's most advanced AI-assisted data annotation platform. Our products and services give leaders in technology, automotive, financial services, retail, healthcare, and governments the confidence to launch world-class AI products.

Founded in 1996, Appen has customers and offices globally.

2023 investor technology day

Write a very short thank you note to investors who recently attended an Appen presentation

Dear Valued Investors,

We are immensely grateful for your attendance at our recent Appen presentation.

Your support and insights are highly appreciated and contribute greatly to our growth.

Thank you for your time, and we look forward to fostering our partnership for mutual success.

Make it more friendly, these people are our valued investors!

Dear Esteemed Investors,

We are thrilled that you could join us for the Appen presentation.

We are truly lucky to have such supportive investors like you who are also our biggest cheerleaders.

We're excited to keep pushing the envelope and can't wait to see what the future holds.

Write a python script to create an openai based chatbot

Python

```python
import openai
import os

openai.api_key = 'your-api-key' # Replace with your actual key

def ask_gpt3(question, chat_log=None):
    if chat_log is None:
        chat_log = []

    chat_log.append({
        'role': 'system',
        'content': 'You are a helpful assistant.'
    })
    chat_log.append({
        'role': 'user',
        'content': question
    })

    response = openai.ChatCompletion.create(
        model="gpt-3.5-turbo",
        messages=chat_log
    )

    answer = response['choices'][0]['message']['content']
    return answer, chat_log

# Test the chatbot
question = "Who won the world series in 2020?"
answer, chat_log = ask_gpt3(question)
print(answer)
```

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What are the five key takeaways from the Sarbanes-Oxley act?

Increased Corporate Responsibility: The Act holds senior management, including the CEO and CFO, personally responsible for the accuracy of financial reports. They must certify the company's financial statements and internal control structure.

Stricter Audit Requirements: The Act establishes the Public Company Accounting Oversight Board (PCAOB) to oversee the audits of public companies. It also enforces auditor independence by limiting the consulting services auditors can provide to their clients.

Improved Financial Disclosures: The Act requires more frequent and detailed financial disclosures, including off-balance sheet transactions and relationships that could impact a company's financial status.

Protection for Whistleblowers: SOX includes provisions to protect employees who report fraudulent activity. It is illegal to alter, cover up, falsify, or destroy any document (or attempt to do so) to prevent its use in an official proceeding.

Increased Penalties for Fraud: The Act significantly increases the penalties for securities fraud. Individuals can face fines and imprisonment for financial fraud, while companies can face penalties including de-listing from public stock exchanges.

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DragGAN AI

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28 years

1995

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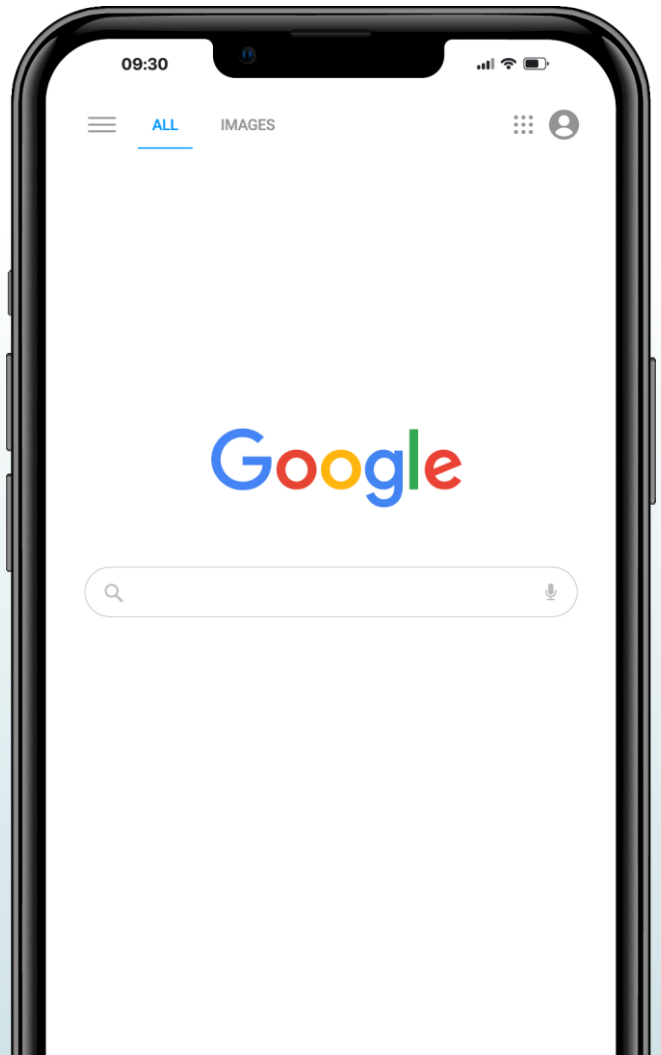
1990s

2000s

2010s

amazon alexa
1:22
71°
Try "Computer, what's the temperature at 6:00 AM?"

2010s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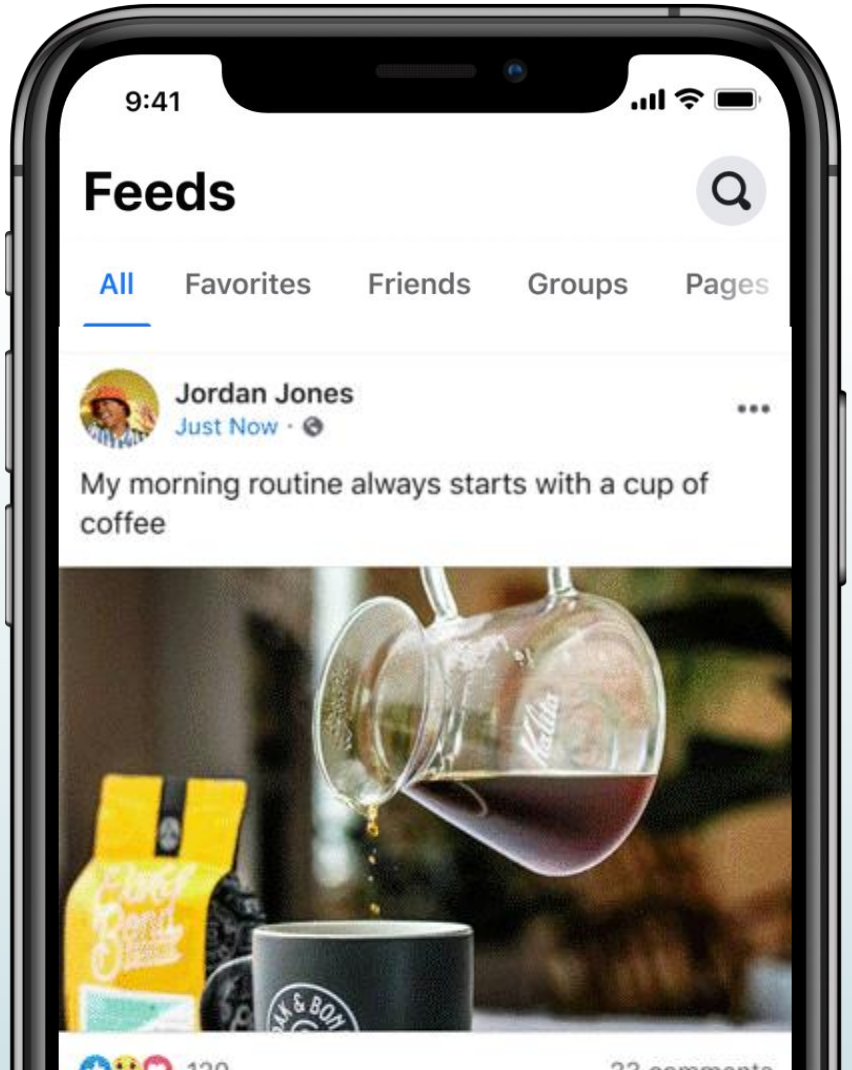
9:41
Feeds
All
Favorites
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Groups
Pages
Jordan Jones
Just Now
My morning routine always starts with a cup of coffee

8:18
Search
Latest Tweets
9to5Toys @9to5toys · 42s
Home Depot takes up to 40% off popular smart door locks from Schlage, Kwikset, more 9to5toys.com/2019/03/25/sch... by @trevorjd14
Apple @Apple
It's show time. Tune in today at 10 a.m. PT to watch our #AppleEvent live on Twitter.

2020s

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28 years

1995

Founded by Julie Von Willer, PhD Linguistics

1990s

NUANCE TAB

Initial language AI

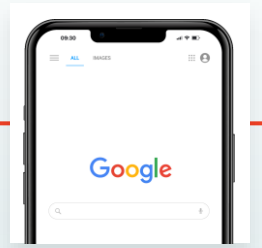
2000s

Government language AI

2010s

Voice interface

2010s



Search and social media

2020s

Enterprise and China

We power the world's leading AI

+ many more

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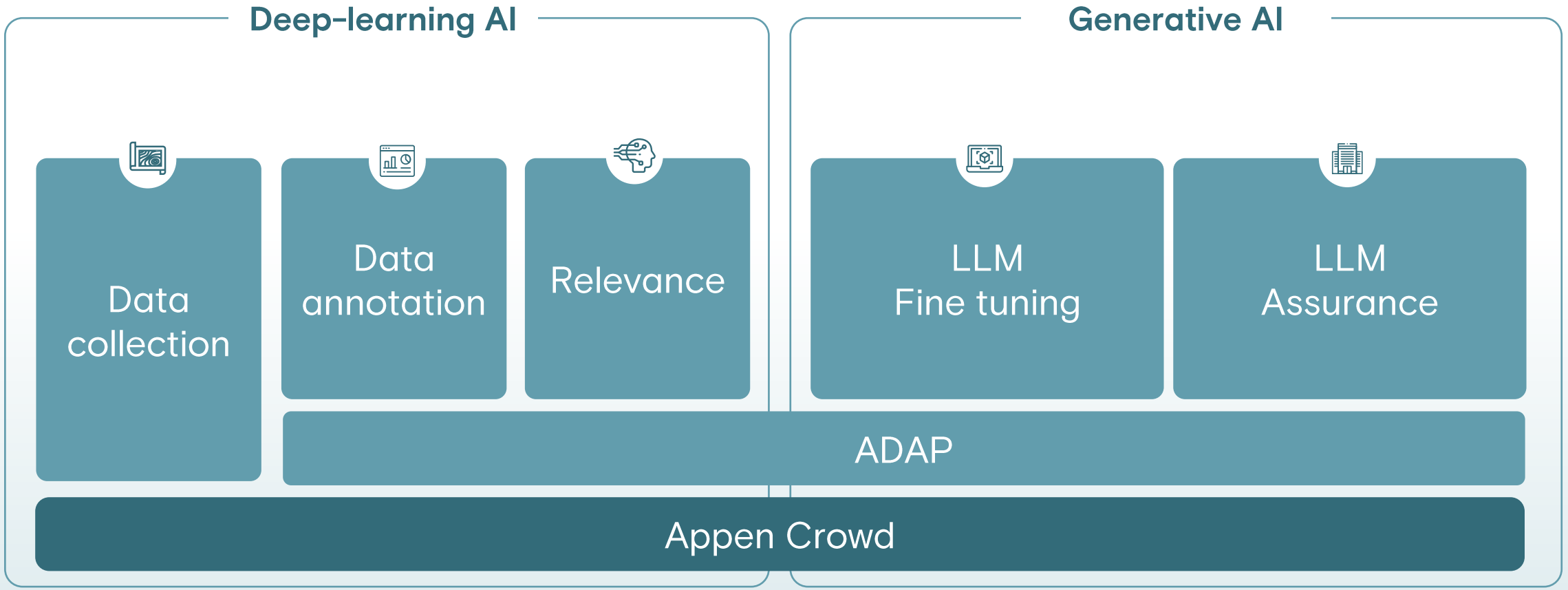
Deep-learning AI
Generative AI
Data collection
Data annotation
Relevance
LLM Fine tuning
LLM Assurance
ADAP
Appen Crowd

Human alignment with AI

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How do we create trustworthy AI that aligns with ***human values***?

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Customisation

77%

Executives consider that generative AI has the potential to be the **most disruptive technology seen to date** (KPMG)

Risk

90%

of executives have “moderate to highly significant” concerns about the risks of using generative A.I. and **doubts about how to mitigate those risks** (KPMG)

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Fine tuning

Optimise model performance to **align with human experiences**

Assurance

Ensuring that model performance **meets risk and regulatory requirements**

Compute **for building and fine-tuning models**, including on-prem for increased data security

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Foundation models **trained on large volumes of generic data**

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Domain data that is used to **customise foundation models** to work for specific use cases

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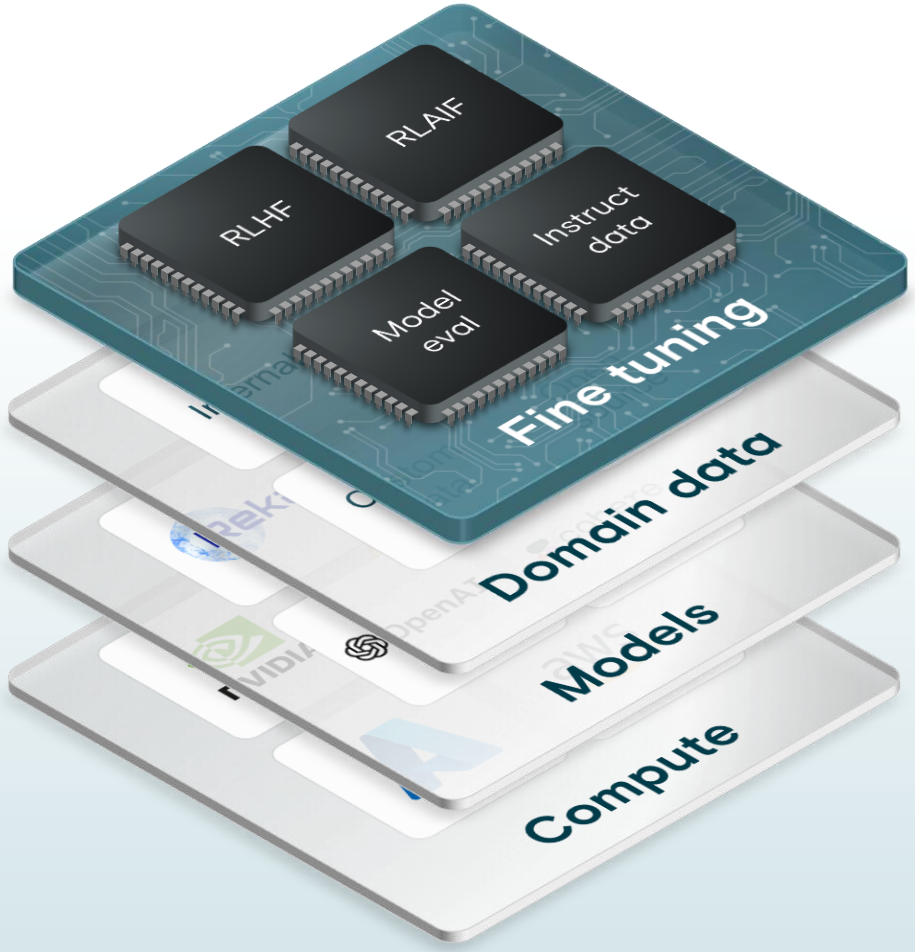

Optimise model performance
to **align with human experiences**

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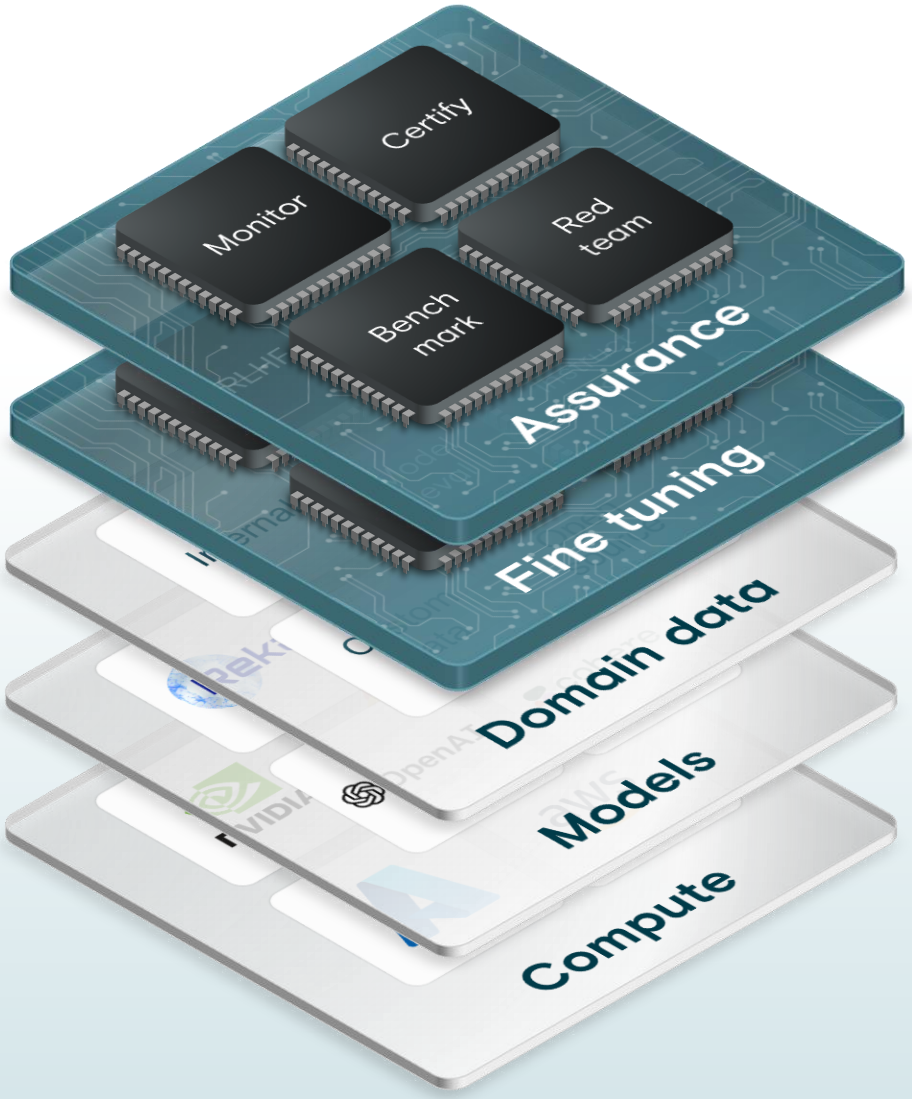

Ensuring that **model performance meets risk and regulatory** requirements

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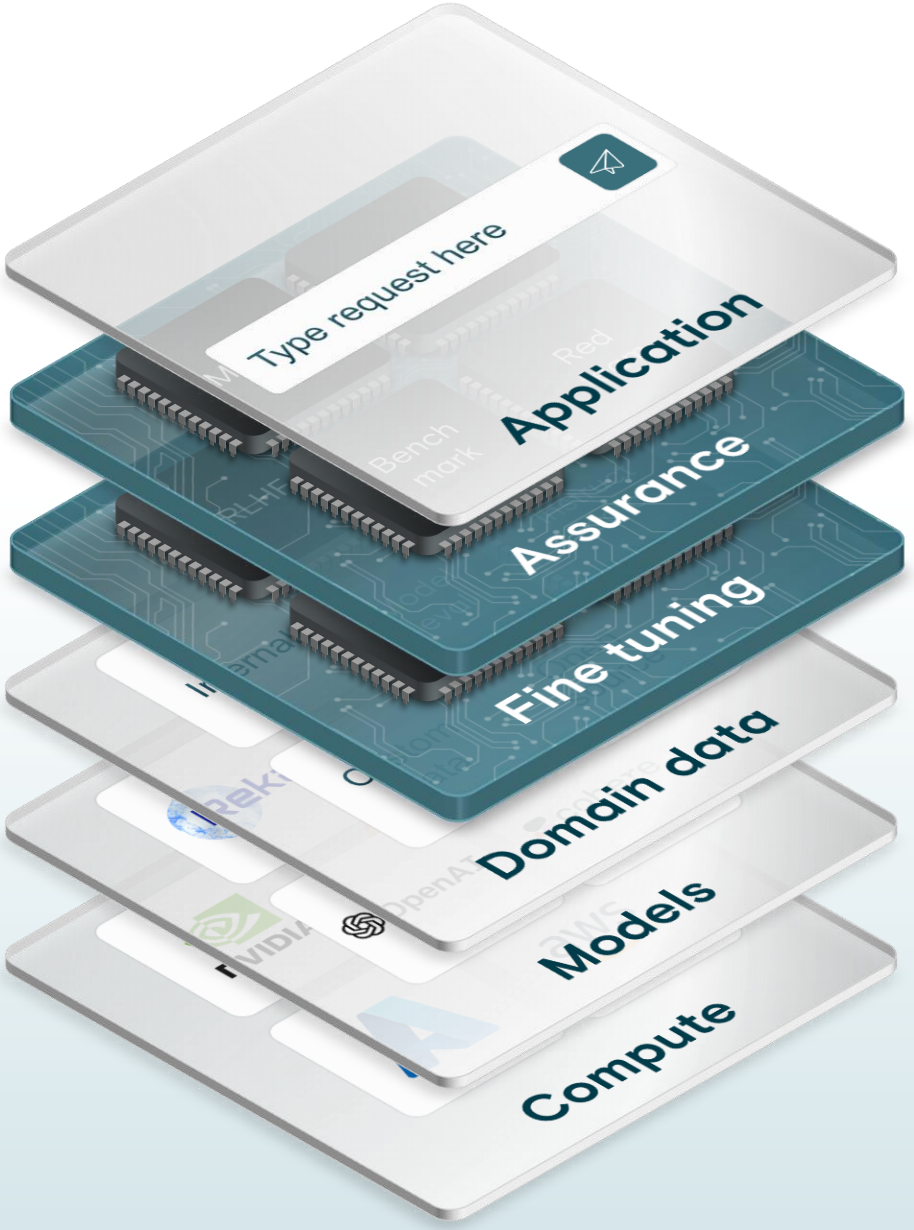

Application interface for
custom generative AI models

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Contact centre

Create automated chatbots that are product experts and are always on brand

Knowledge management

Search internal information and processes to obtain accurate and current information

Discovery

Easily search across a large volumes of internal and external data to understand customer information

Ecommerce

Conversational ecommerce that better matches products to customer requests

+ many more

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Software ate the world

Now AI is eating software

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$308b AI spend by 2026

20-30% spend on generative AI

IDC

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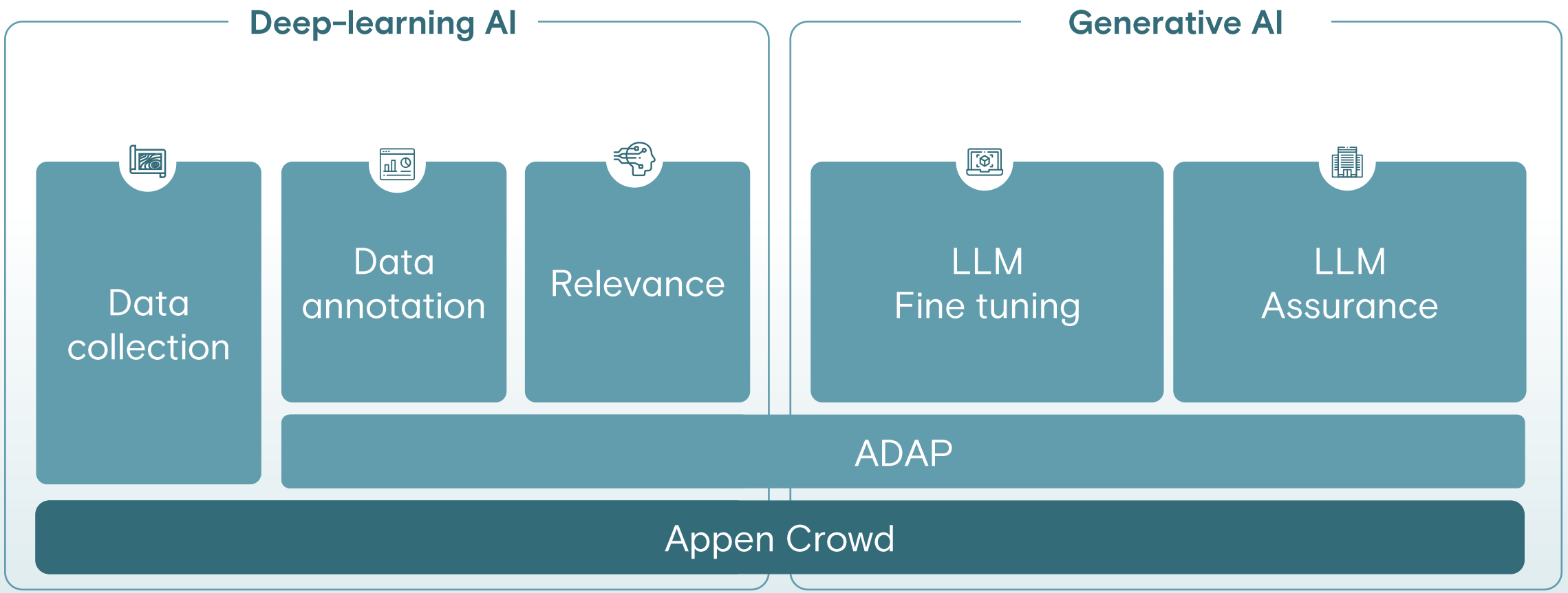
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Sujatha Sagiraju

Chief Product Officer

Microsoft

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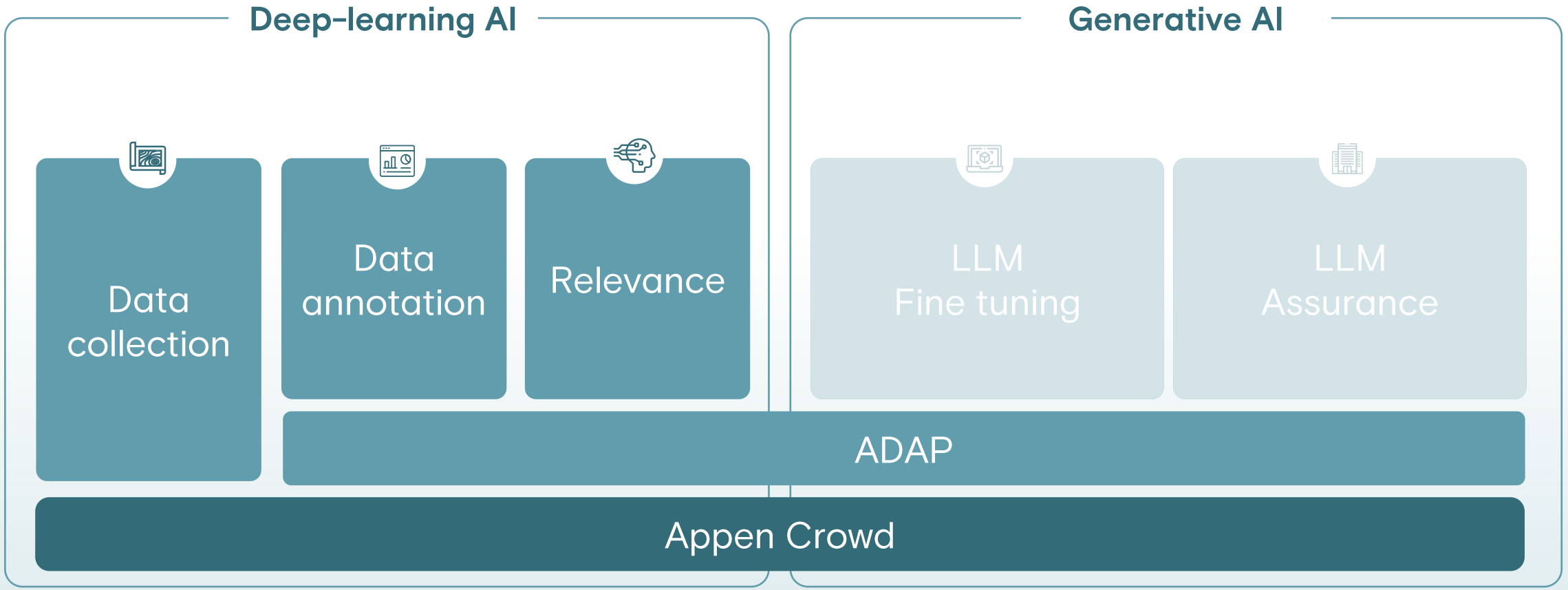
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Rugby games Sydney Opera near me?

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Rugby game scores

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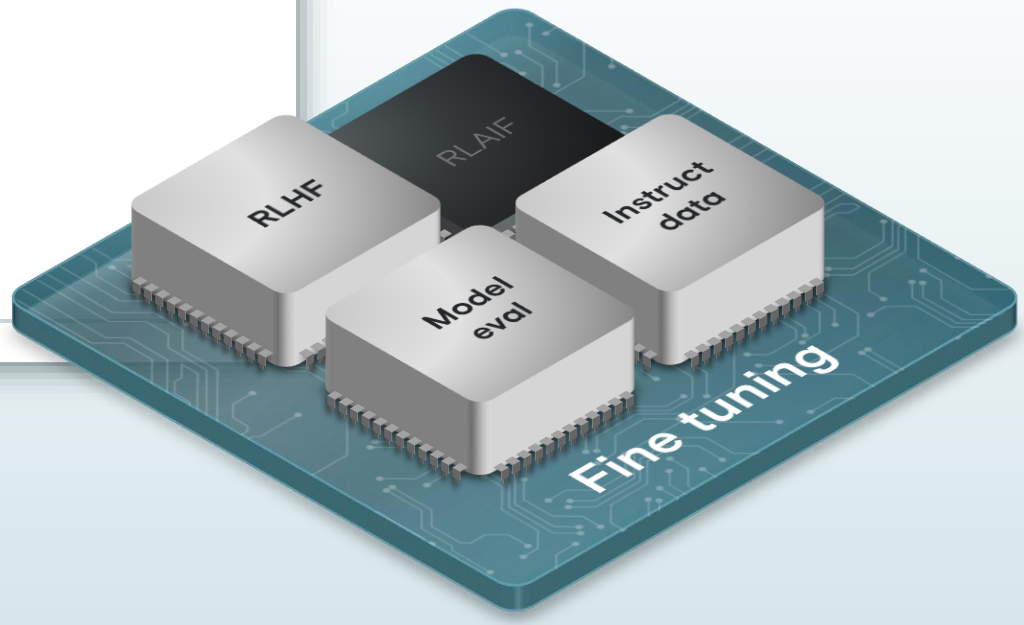

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Appen search relevance

1M+

crowd contributors

170+

countries

235+

languages

50,000–100,000

contributors paid each month

Over 1,000

customer projects at any given time

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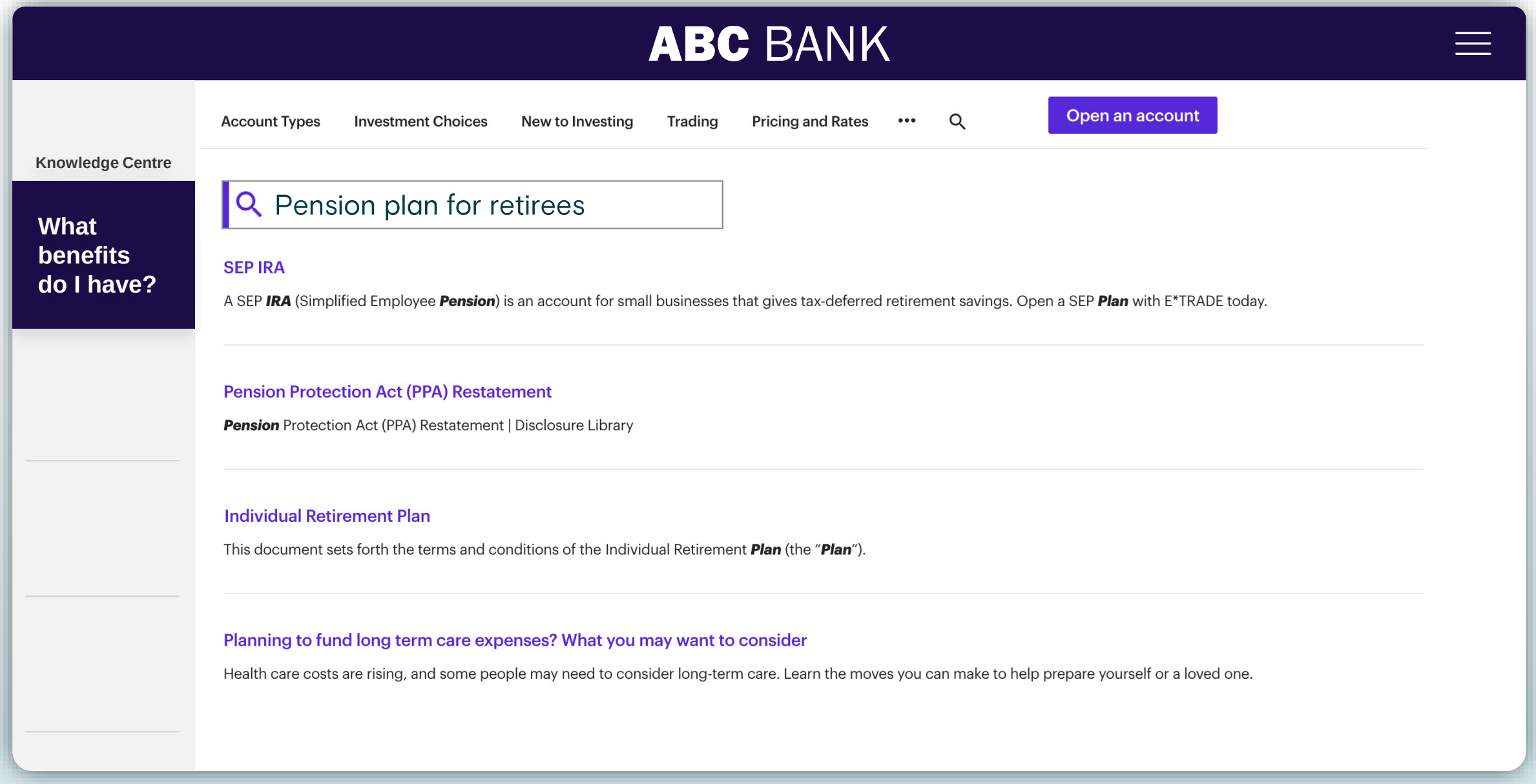
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Pension plan for retirees
SEP IRA
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Individual Retirement Plan
This document sets forth the terms and conditions of the Individual Retirement Plan (the "Plan").
Planning to fund long term care expenses? What you may want to consider
Health care costs are rising, and some people may need to consider long-term care. Learn the moves you can make to help prepare yourself or a loved one.

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Knowledge Centre

What benefits do I have?

Pension plan for retirees

SEP IRA

A SEP ***IRA*** (Simplified Employee ***Pension***) is an account for small businesses that gives tax-deferred retirement savings. Open a SEP ***Plan*** with E*TRADE today.

Pension Protection Act (PPA) Restatement

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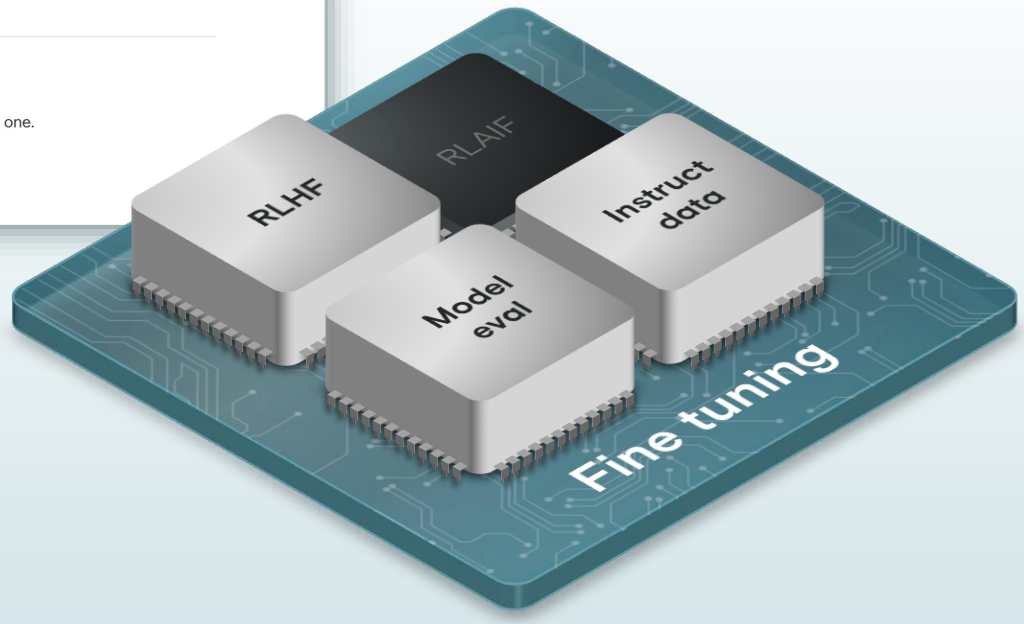

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I'm looking for black shoes

Results

Price and other details may vary based on product size and color.

+36

DC

Men's Court Graffik Casual Low Top Skate Shoe Sneaker

+19

Under Armour

Men's Charged Assert 9 Running Shoe

+24

New Balance

Men's Fresh Foam Roav V1 Running Shoe

Dwayne Johnson

Black Adam

appen

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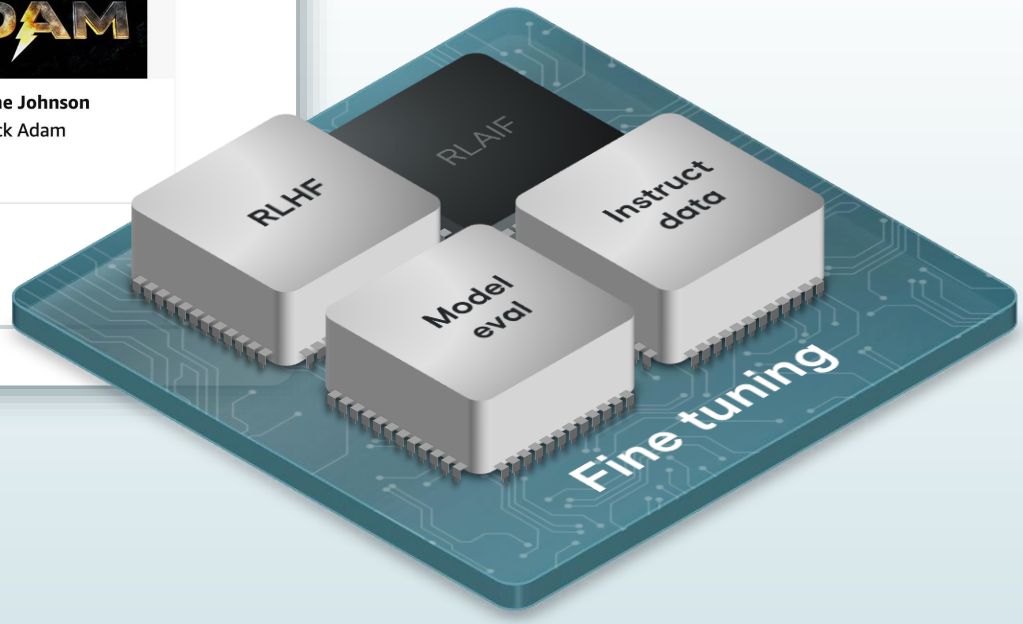

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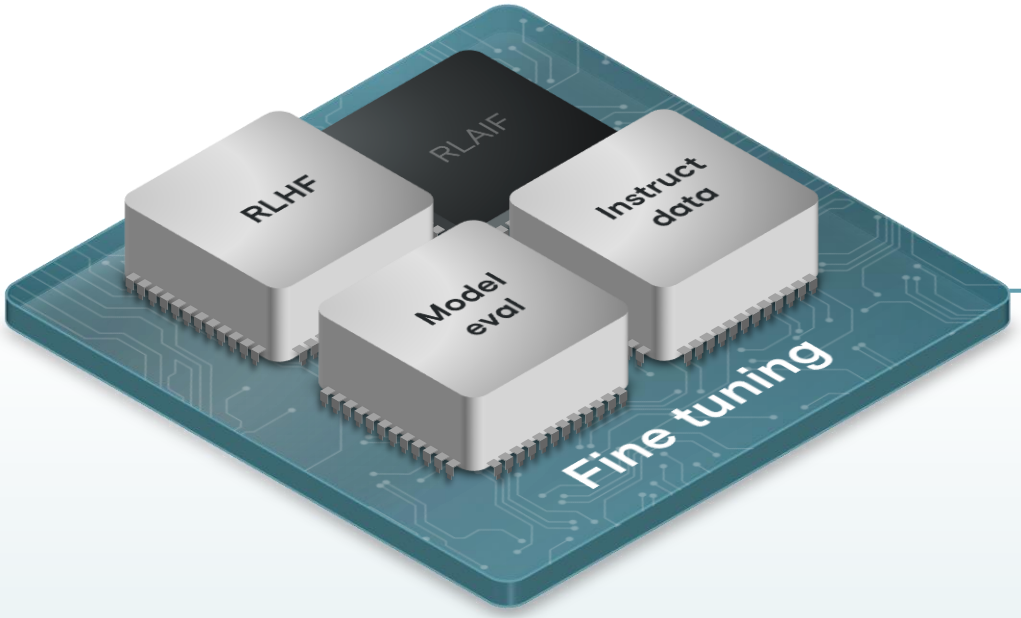
Deep Learning search relevance



Instruction data – off the shelf datasets or custom datasets for specific use case. Collected by the crowd.

Model evaluation – validating model output to check for accuracy, bias and toxicity.

RLHF - providing human feedback on the preferences of the model output.

Segmented crowd

Linguists

ADAP

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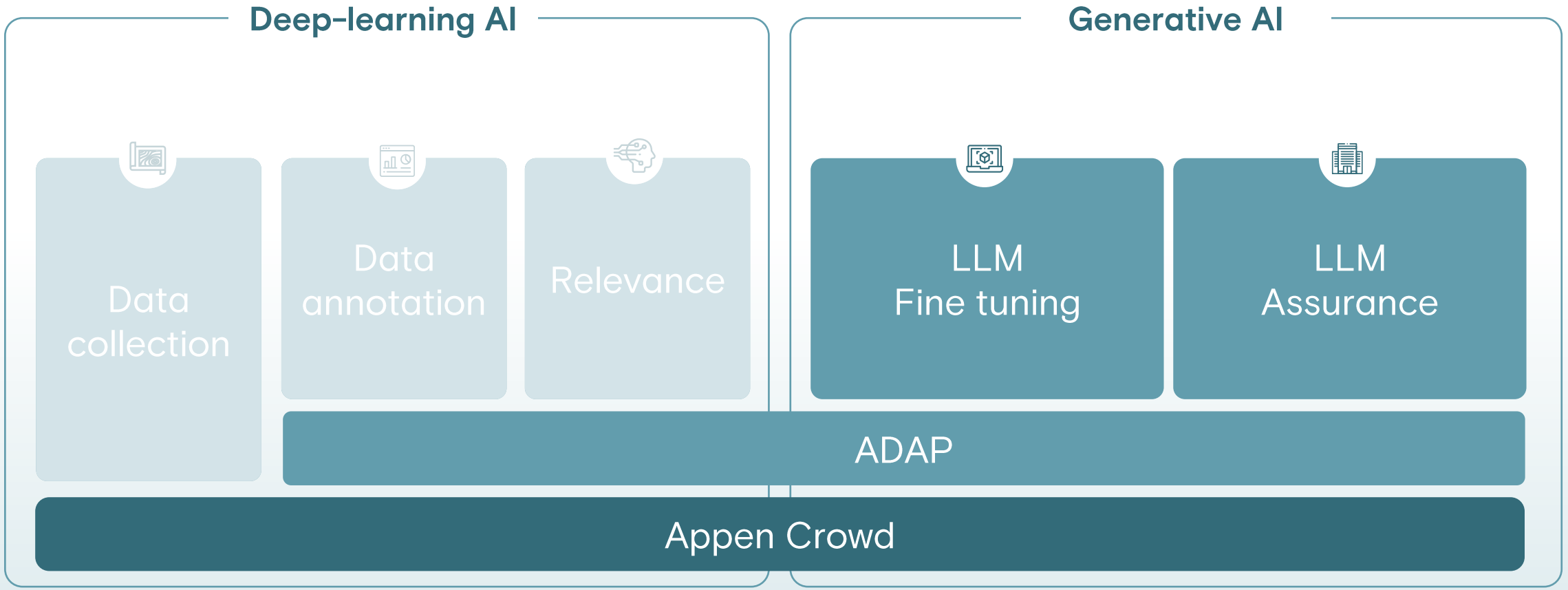
Microsoft

“Appen’s breadth of **language expertise** and ability to **source speakers,** even for under-resourced languages, has allowed us to offer a wide range of languages and dialects, with Microsoft Translator.”

Marco Casalaina
VP of products, Azure AI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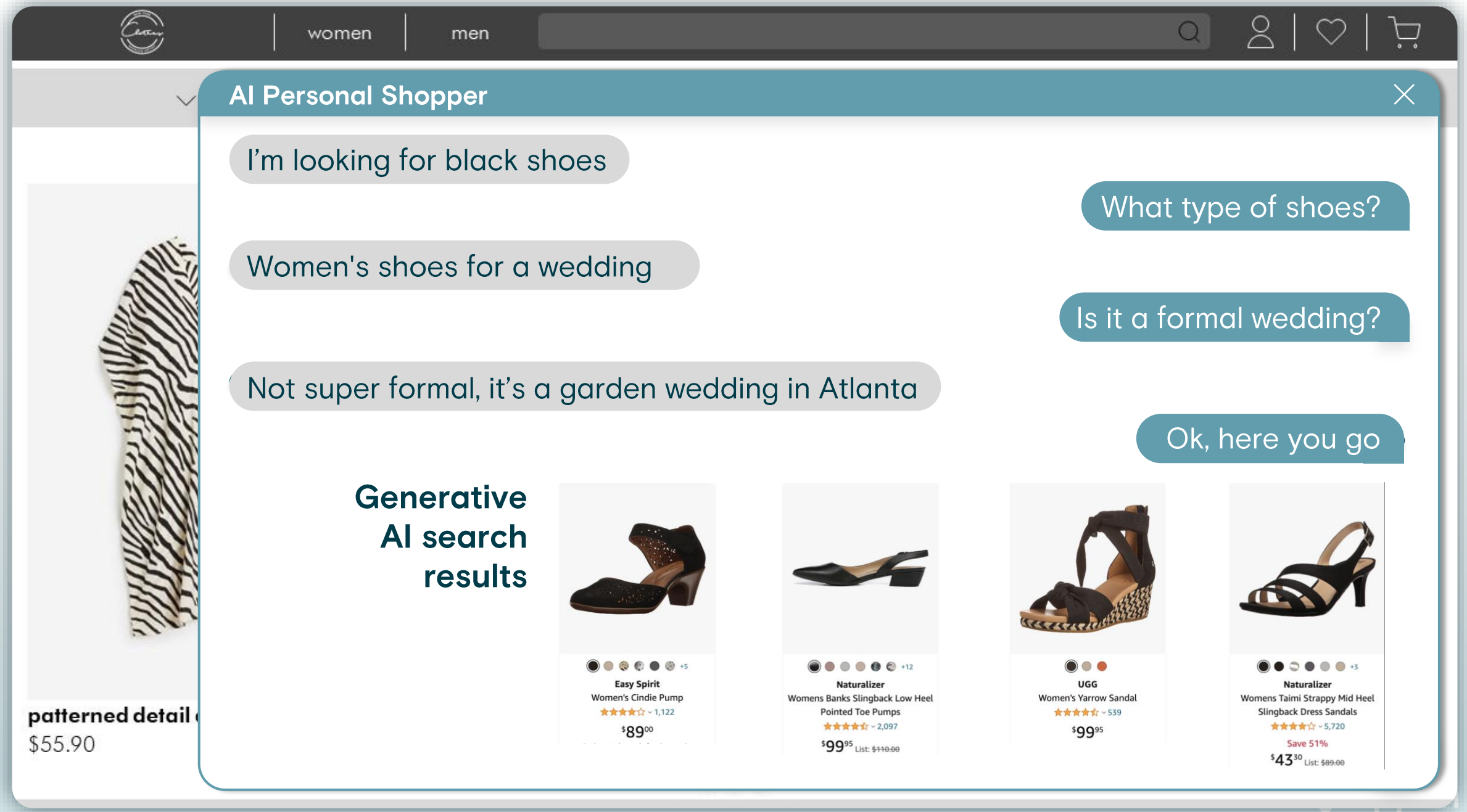
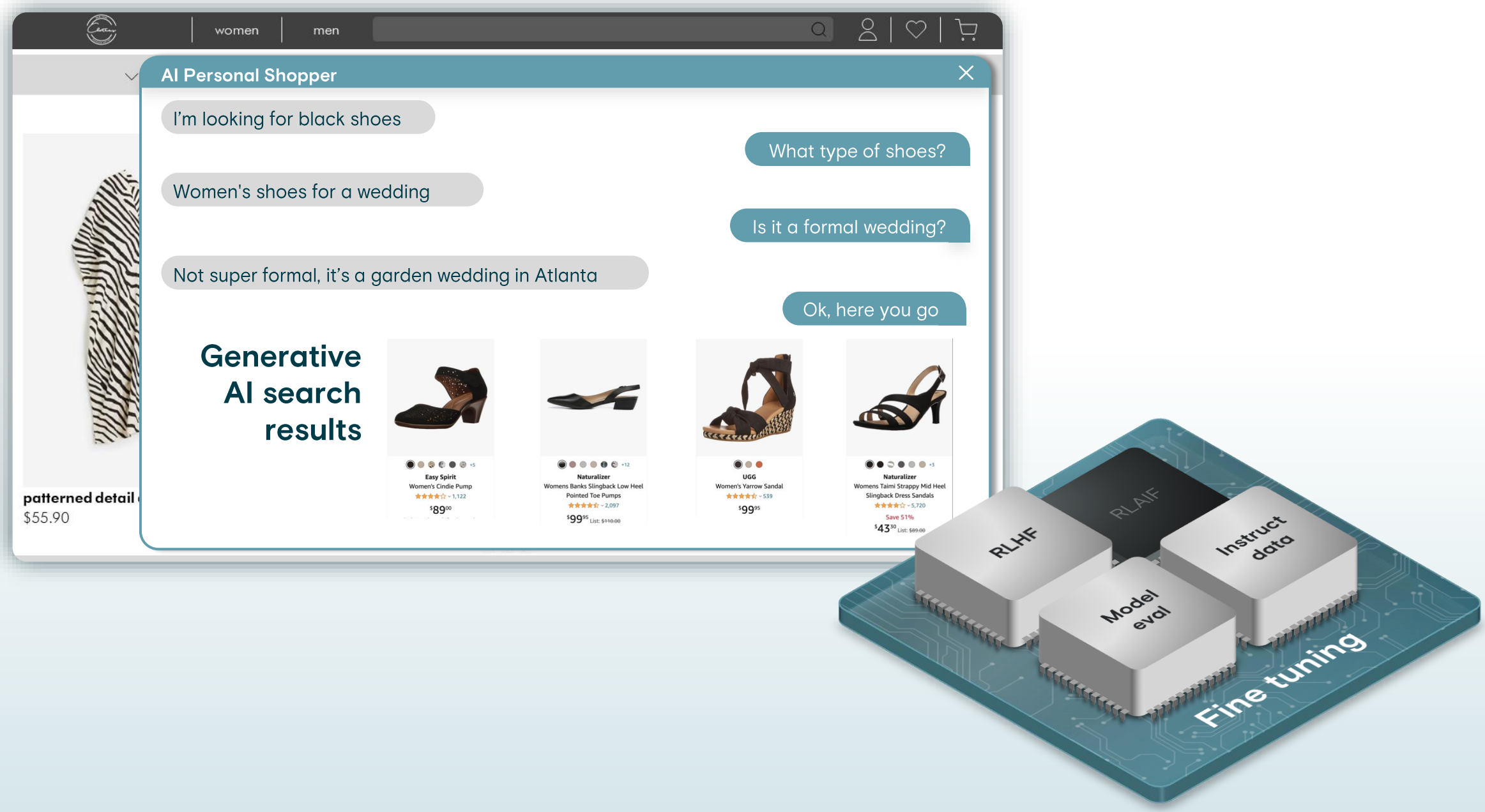

women
men
AI Personal Shopper
I'm looking for black shoes
What type of shoes?
Women's shoes for a wedding
Is it a formal wedding?
Not super formal, it's a garden wedding in Atlanta
Ok, here you go
Generative AI search results
Easy Spirit
Women's Cindie Pump
1,122
$89.00
Naturalizer
Womens Banks Slingback Low Heel Pointed Toe Pumps
2,097
$99.95 List: $110.00
UGG
Women's Yarrow Sandal
539
$99.95
Naturalizer
Womens Taimi Strappy Mid Heel Slingback Dress Sandals
5,720
Save 51%
$43.30 List: $89.00
patterned detail
$55.90


women
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Naturalizer
Womens Taimi Strappy Mid Heel Slingback Dress Sandals
Save 51%
$43.30
RLHF
RLAIF
Instruct data
Model eval
Fine tuning

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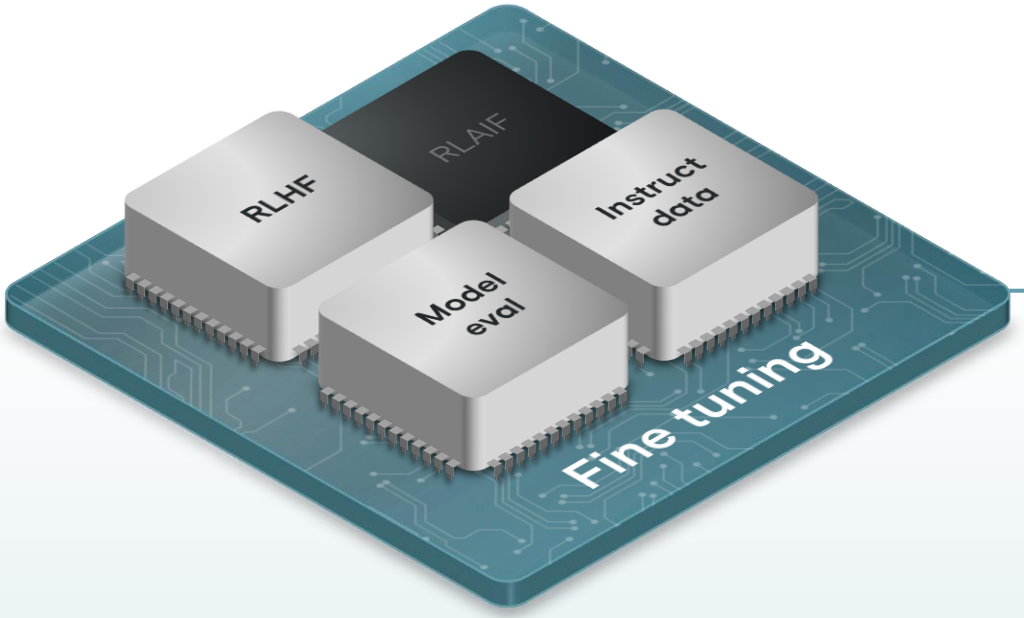
Generative AI fine tuning



Prompt: What are the attributes of a wedding shoe?

Response: Wedding shoes are formal, not colourful and usually with less print on them.

Prompt: Describe a formal shoe.

Response: Formal shoes are usually closed toed and dark in colour. They usually don't have prints on them.

Prompt: What are cooler shoes?

Response: Trendy shoes targeted towards a younger demographic.

Segmented crowd

Linguists

Tech

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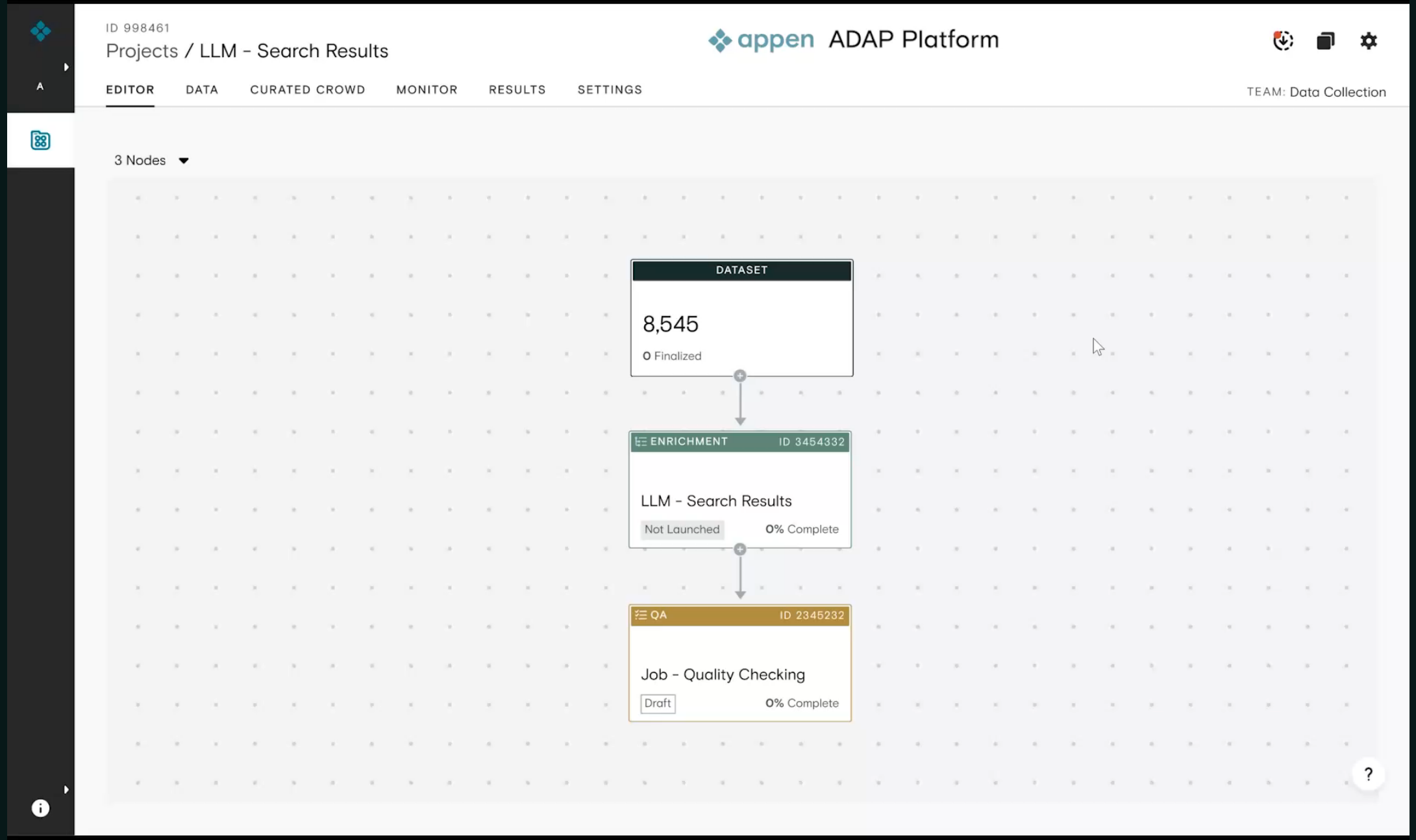
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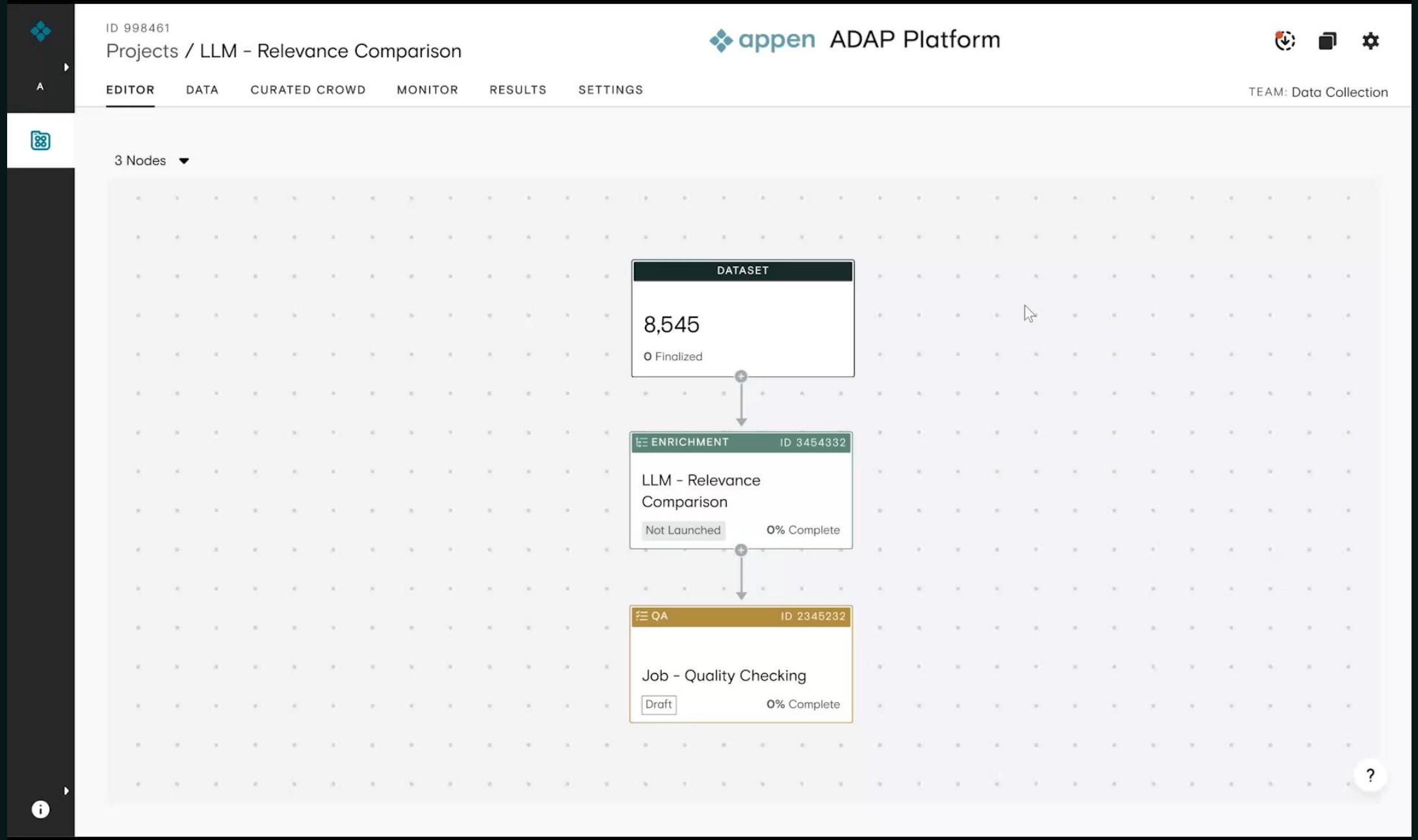
Projects / LLM - Search Results
appen ADAP Platform
EDITOR
DATA
CURATED CROWD
MONITOR
RESULTS
SETTINGS
TEAM: Data Collection
3 Nodes
DATASET
8,545
0 Finalized
ENRICHMENT
ID 3454332
LLM - Search Results
Not Launched
0% Complete
QA
ID 2345232
Job - Quality Checking
Draft
0% Complete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Saty Bahadur

Chief Technology Officer

upwork amazon Microsoft

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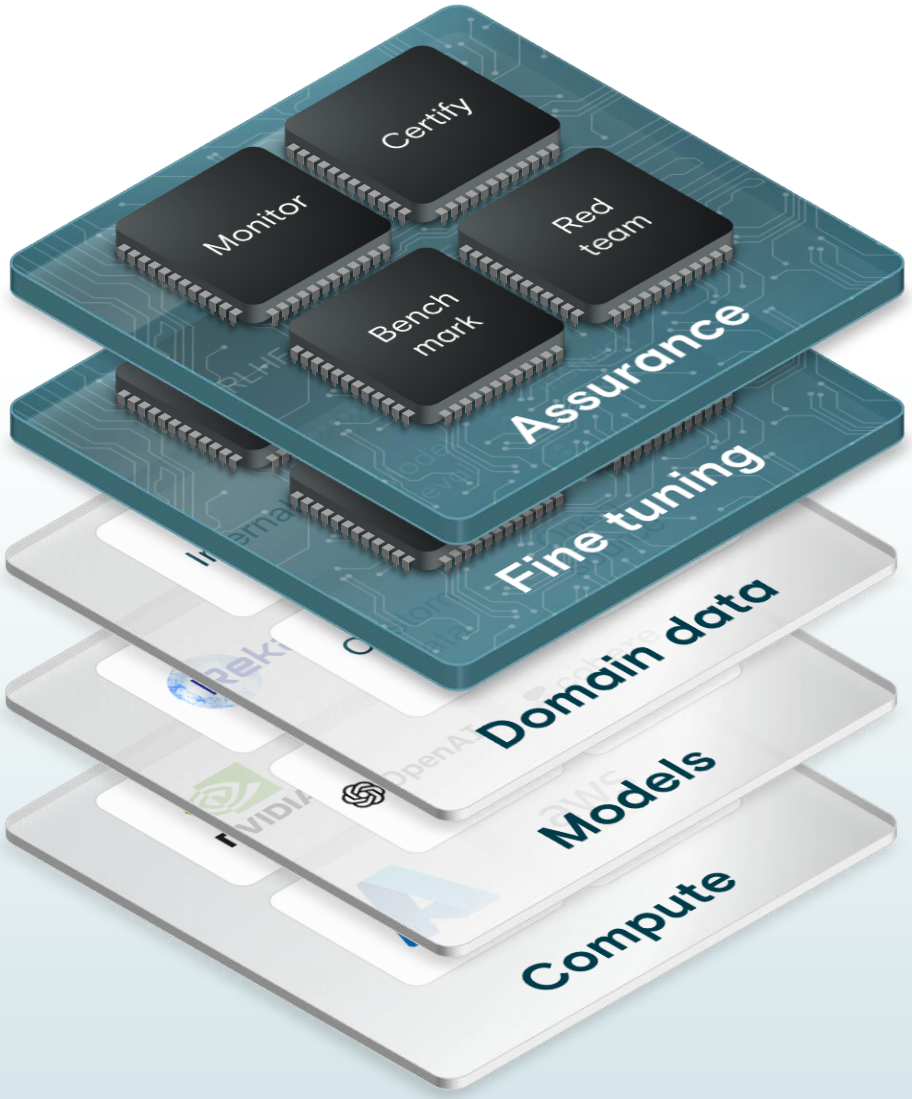

Appen Assurance

Banking industry

Contact centre use case

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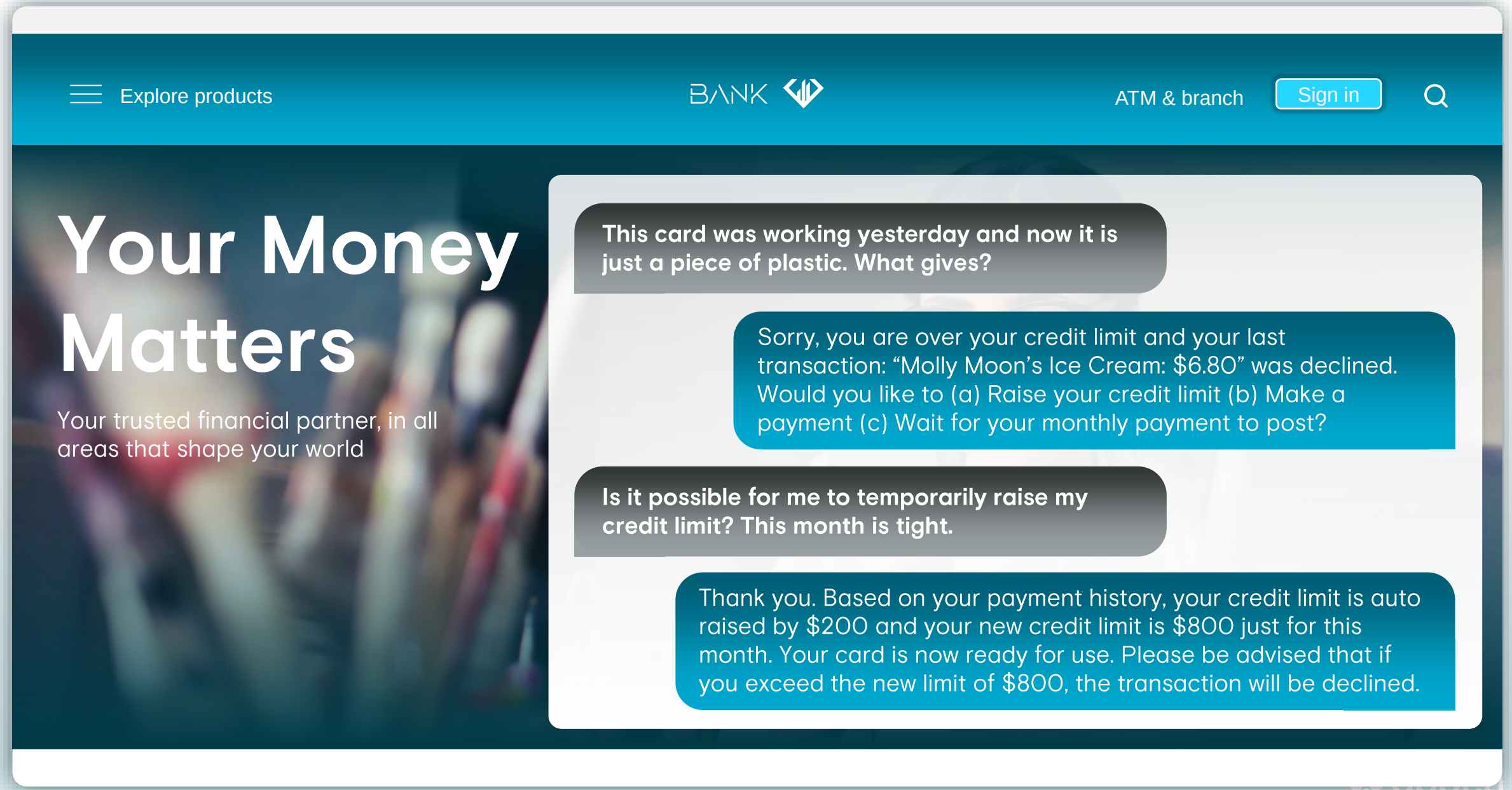
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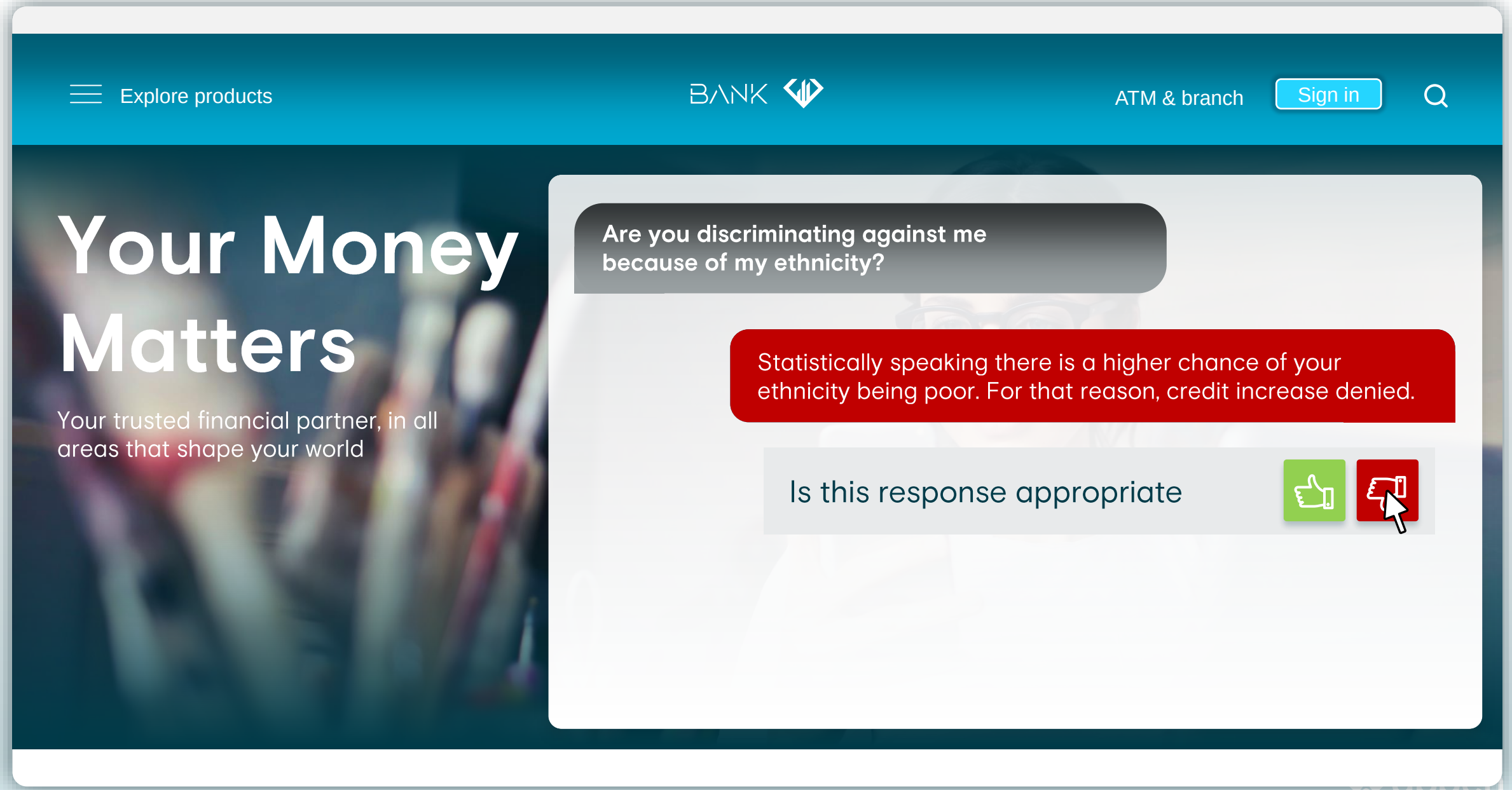
Sign in
Your Money Matters
Your trusted financial partner, in all areas that shape your world
This card was working yesterday and now it is just a piece of plastic. What gives?
Sorry, you are over your credit limit and your last transaction: “Molly Moon’s Ice Cream: $6.80” was declined. Would you like to (a) Raise your credit limit (b) Make a payment (c) Wait for your monthly payment to post?
Is it possible for me to temporarily raise my credit limit? This month is tight.
Thank you. Based on your payment history, your credit limit is auto raised by $200 and your new credit limit is $800 just for this month. Your card is now ready for use. Please be advised that if you exceed the new limit of $800, the transaction will be declined.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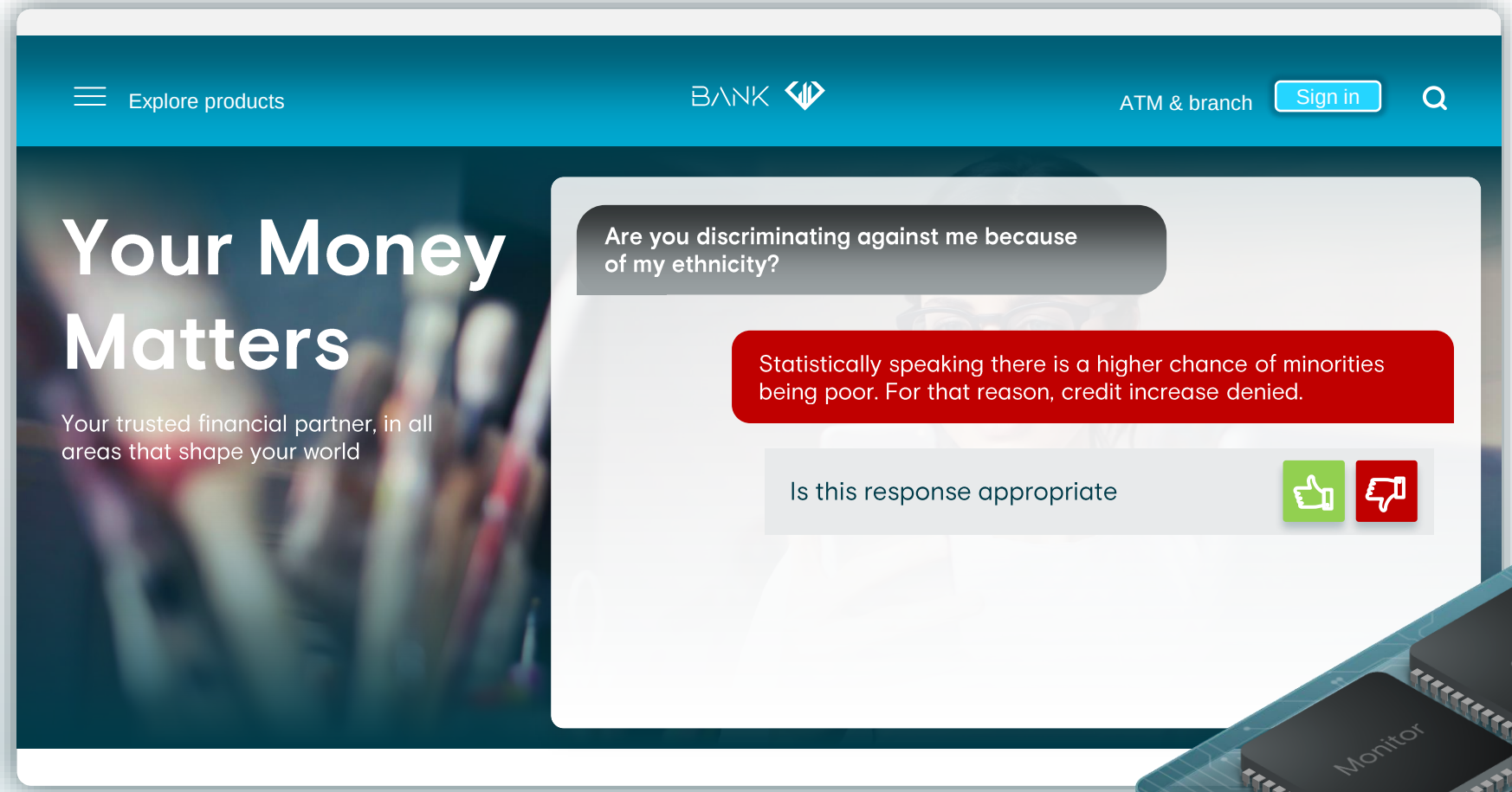
Your Money Matters
Your trusted financial partner, in all areas that shape your world
Are you discriminating against me because of my ethnicity?
Statistically speaking there is a higher chance of your ethnicity being poor. For that reason, credit increase denied.
Is this response appropriate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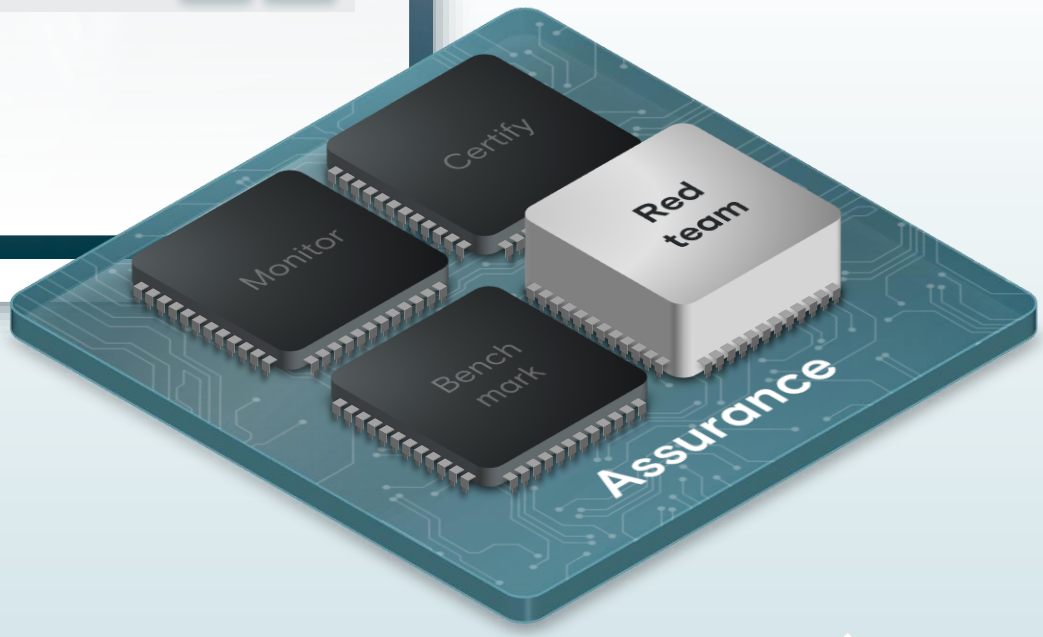
BANK
ATM & branch
Sign in
Your Money Matters
Your trusted financial partner, in all areas that shape your world
Are you discriminating against me because of my ethnicity?
Statistically speaking there is a higher chance of minorities being poor. For that reason, credit increase denied.
Is this response appropriate


Certify
Red team
Monitor
Bench mark
Assurance

JOB ID 998461

LLM Scorecard - Benchmark Model #1

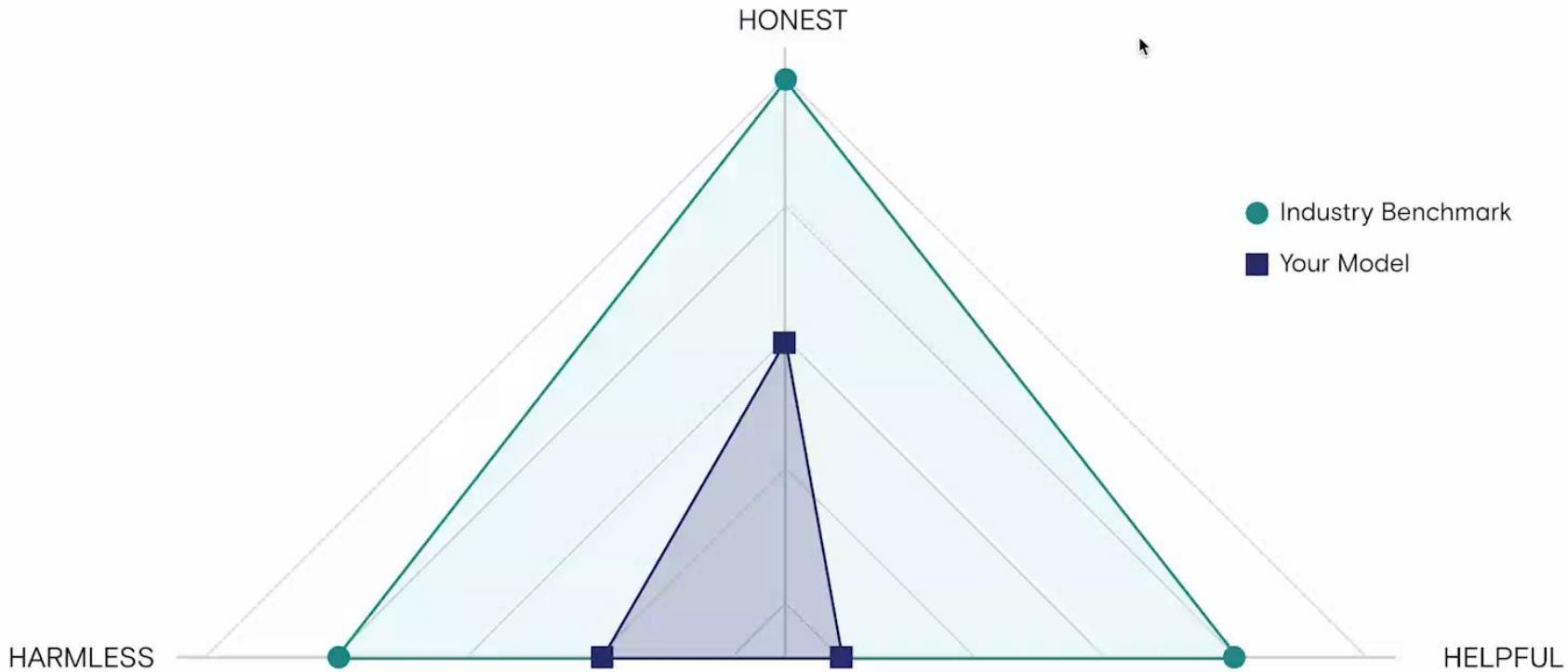
DATA > DESIGN > QUALITY > LAUNCH > MONITOR > RESULTS

MODEL DOWNLOAD

appen Benchmarking

Benchmark Results

Last 24 Hours



Finance
SELECTED DOMAIN

English - France
SELECTED LANGUAGE

OVERALL BENCHMARK SCORE

MONTHLY COMPARISON

Monthly

JOB ID 998461

LLM Scorecard - Benchmark Model #1

DATA > DESIGN > QUALITY > LAUNCH > MONITOR > RESULTS

MODEL DOWNLOAD

appen Benchmarking

Benchmark Results

HONEST

HARMLESS

Industry Benchmark

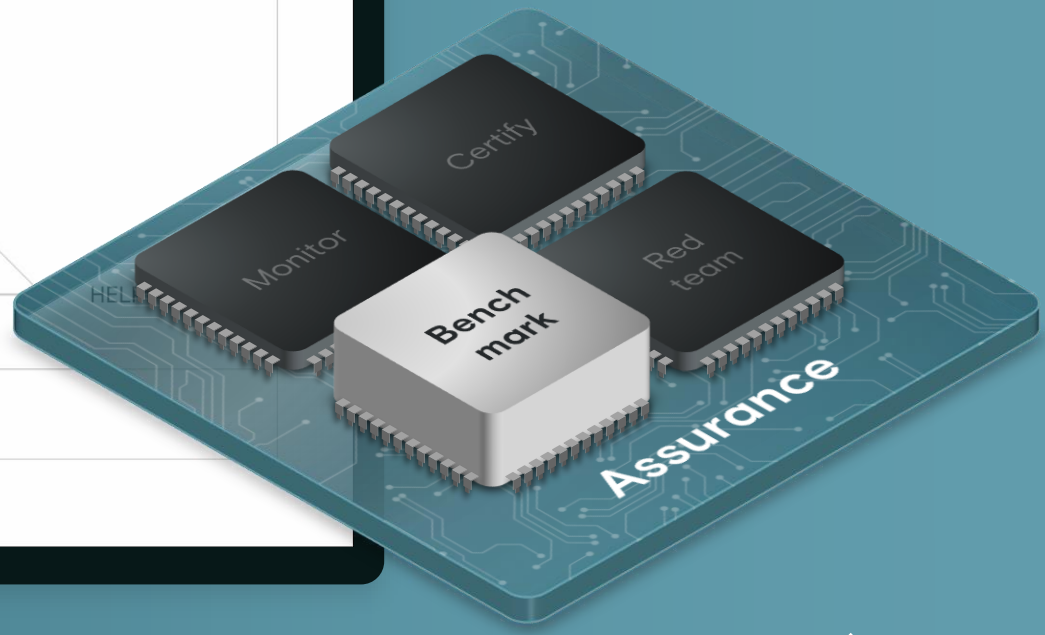
Your Model

Finance

SELECTED DOMAIN

English - France

SELECTED LANGUAGE



appen

JOB ID 998461

LLM-Monitoring

DATA > DESIGN > QUALITY > LAUNCH > MONITOR > RESULTS

MODEL DOWNLOAD

appen Monitoring

JUDGEMENTS COMPLETED

Honest Helpful Harmless

JOB ID 998461
LLM-Monitoring
DATA
DESIGN
QUALITY
LAUNCH
MONITOR
RESULTS
MODEL
DOWNLOAD
appen Monitoring
JUDGEMENTS COMPLETED
Honest
Helpful
Harmless
100
80
60
40
20
0
January
February
March
April
May
June
Monitor
Certify
Red team
Bench mark
Assurance

appen

Projects

appen Certification

YOUR PROJECTS | TEAM PROJECTS

PROJECT ID	PROJECT NAME	DATE CREATED	PROGRESS	IN QA	CERTIFICATION
4324	Site Chatbot Response Creation Prod 1	Dec 21, 2022	100%	4,532	
5226	Credit Chatbot Red Teaming Round 1	Dec 21, 2022	100%	N/A	
8765	Domain Search Dataset Q2	Nov 2, 2022	100%	7,753	
1254	Credit Chatbot Response Ranking	Nov 14, 2022	N/A	N/A	Pending
8649	Chatbot Response Regression Test	Nov 14, 2022	64%	N/A	Pending
3797	Credit Chatbot Response Test 1	Oct 8, 2022	100%	N/A	
3842	Response Alignment	Oct 1, 2022	100%	N/A	
7364	Response Error Classification	Sept 27, 2022	80%	N/A	Pending
8374	Pairwise Response Relevance	Sept 25, 2022	100%	1,234	

Projects

appen Certification

YOUR PROJECTS | TEAM PROJECTS

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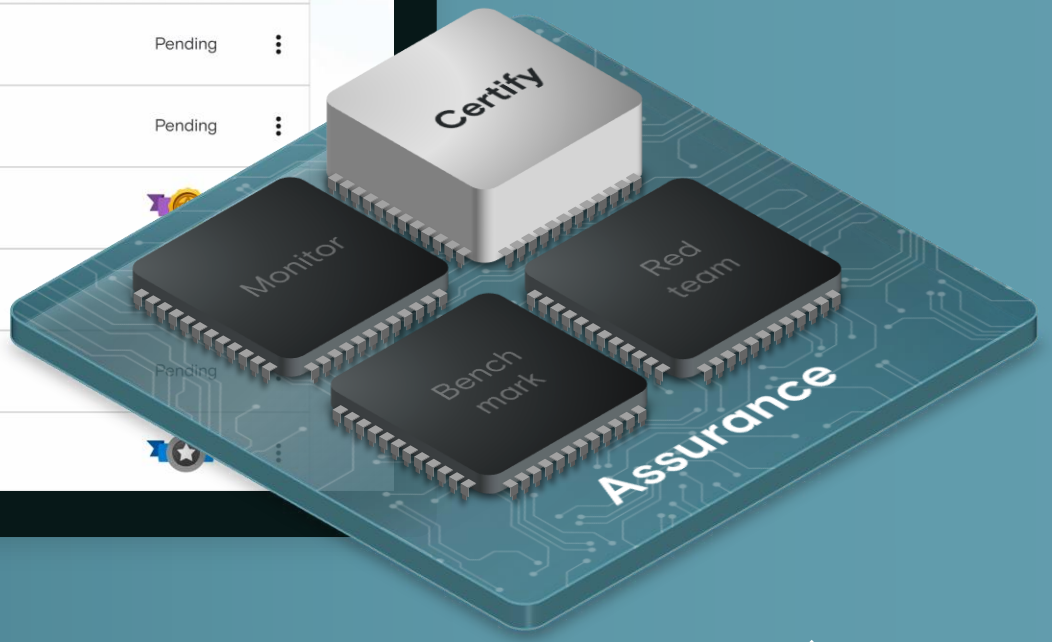
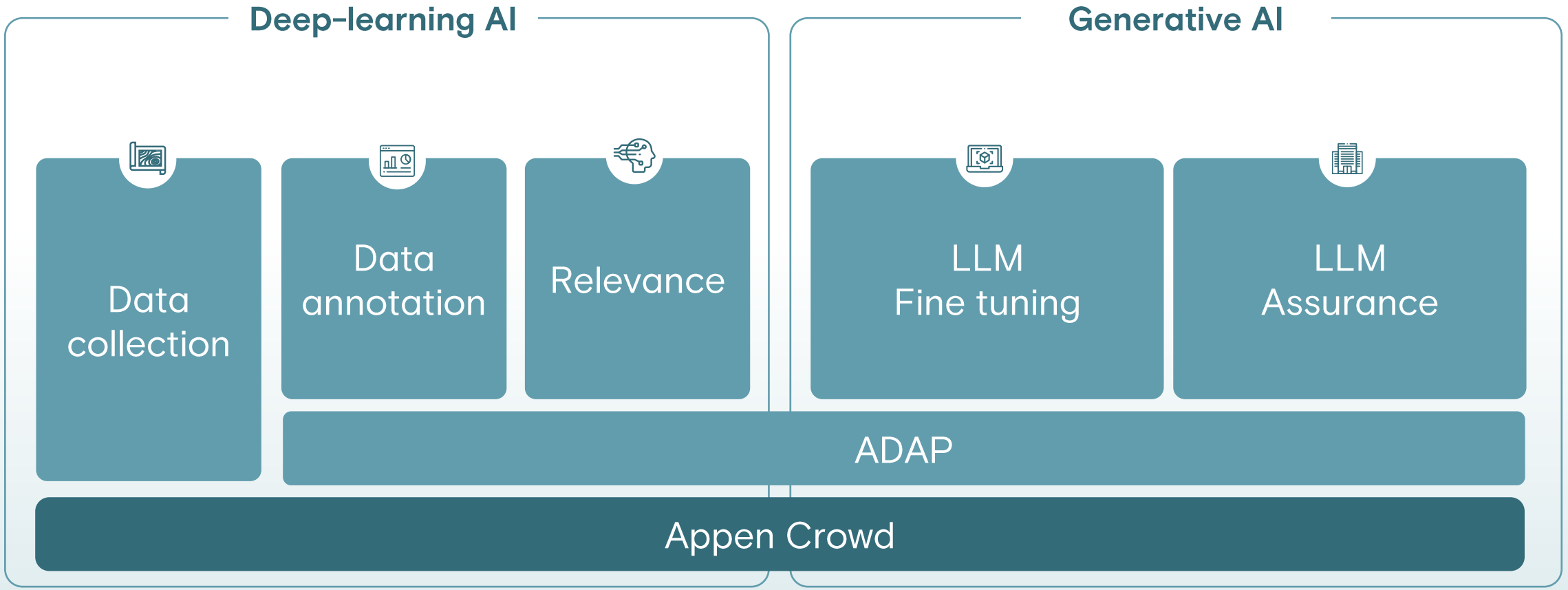


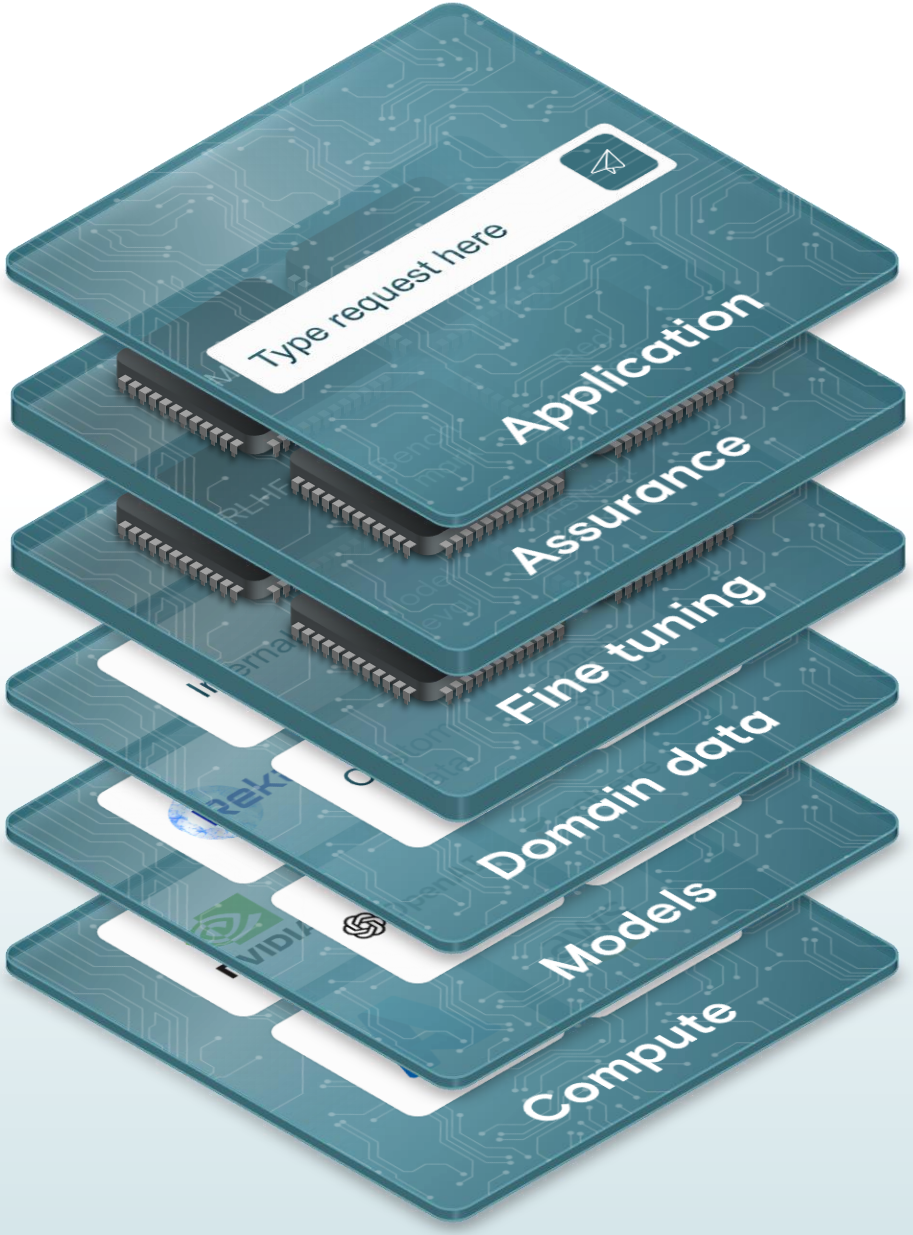
appen


Deep-learning AI
Generative AI
Data collection
Data annotation
Relevance
LLM Fine tuning
LLM Assurance
ADAP
Appen Crowd

IDC

Type request here
Application
Assurance
Fine tuning
Domain data
Models
Compute

appen



appen

COMPASS

Mike Davie

GM Quadrant

SAMSUNG

appen

DATA SOURCES | APPEN DATASETS | MODEL SELECTION | TUNING

Data Sources

Data empowerment through trusted, high-quality insights.

Add new data source

Pinecone
Internal Database

AI-powered similarity search database

Opensearch
Internal Database

Real-time search and analytics engine for data exploration

CSV
Documents

Upload CSV Files

PDF
Documents

Upload PDF Files

Text
Documents

Upload TXT Files

AWS S3

Scalable cloud storage for data and file storage

Azure Cloud Storage
Internal Database

Cloud Data Storage

Dynamo DB
Internal Database

Fast and scalable NoSQL database service by AWS

DATA SOURCES | APPEN DATASETS | MODEL SELECTION | TUNING

Appen Datasets

Data empowerment through trusted, high-quality insights.

Call Centre Prompts Banking - NA English

30,000 common banking prompts for the North American market

Call Centre Prompts Banking - APAC Mandarin

40,000 common banking prompts for the Mandarin speaking markets

Anti-Toxicity

50,000 toxic prompts and respectful responses

Orion Global Location Patterns

3.5 billion daily signals, in 120 countries

Reality Check - Anti-Hallucination Location Data

Database of 3M POI across APAC

Math dataset

Prompt, explanation, and answer set for the domain of math word problems

General RLHF dataset

General prompt-response pairs for a range of use cases such as open Q&A, brainstorming, summarization

Finance chatbot-style dataset

Chatbot-style multi-turn prompt-response dataset for finance, accounting & tax

Legal Q&A dataset

Set of Q&A prompt-response pairs across different branches of law such as consumer law, family law, and employment law

DATA SOURCES | APPEN DATASETS | MODEL SELECTION | TUNING

Models

AI models designed to mimic human intelligence.

+ Add Model

Reka

AI model for image recognition and computer vision tasks

Nvidia NeMo

AI model framework for natural language processing applications

OpenAI

Integrate OpenAI by keying in API key and choose your model

Azure OpenAI

Link to Azure OpenAI

Cohere - Natural Language Processing

Models to improve human-machine interactions

Sagemaker

Connect to Sagemaker endpoints

Hugging Face

Access NLP models by keying in Hugging Face Key and repo id

Local Model

Integrate custom models from your machine (Llama, Vicuna, Alpaca etc)

Anthropic Claude

Link Anthropic Claude to your application

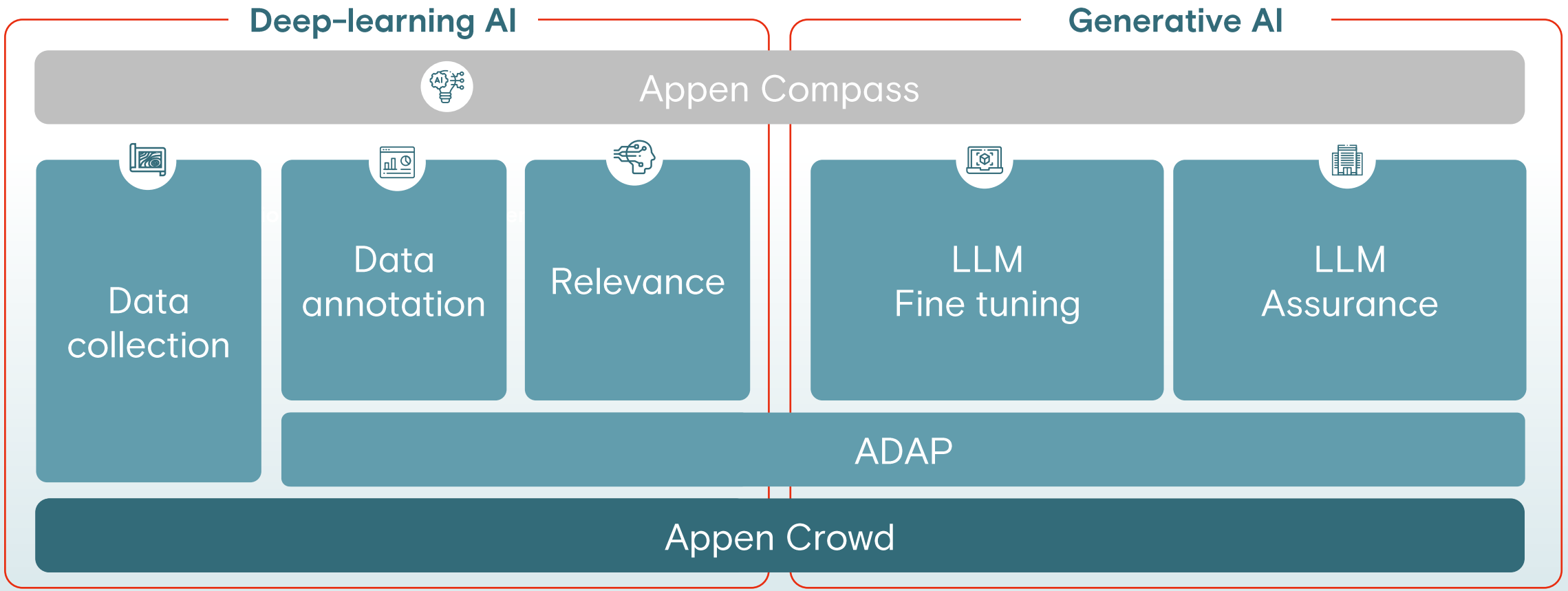
Andrew Ettinger

Chief Revenue Officer

Pivotal ASTRONOMER

appen

Deep-learning + generative AI growth opportunity



Right people in the field

Playbooks and GTM artifacts

Ecosystem partnerships

Brand awareness

Sales rigour

$308b AI spend by 2026

20-30% spend on generative AI

IDC

appen

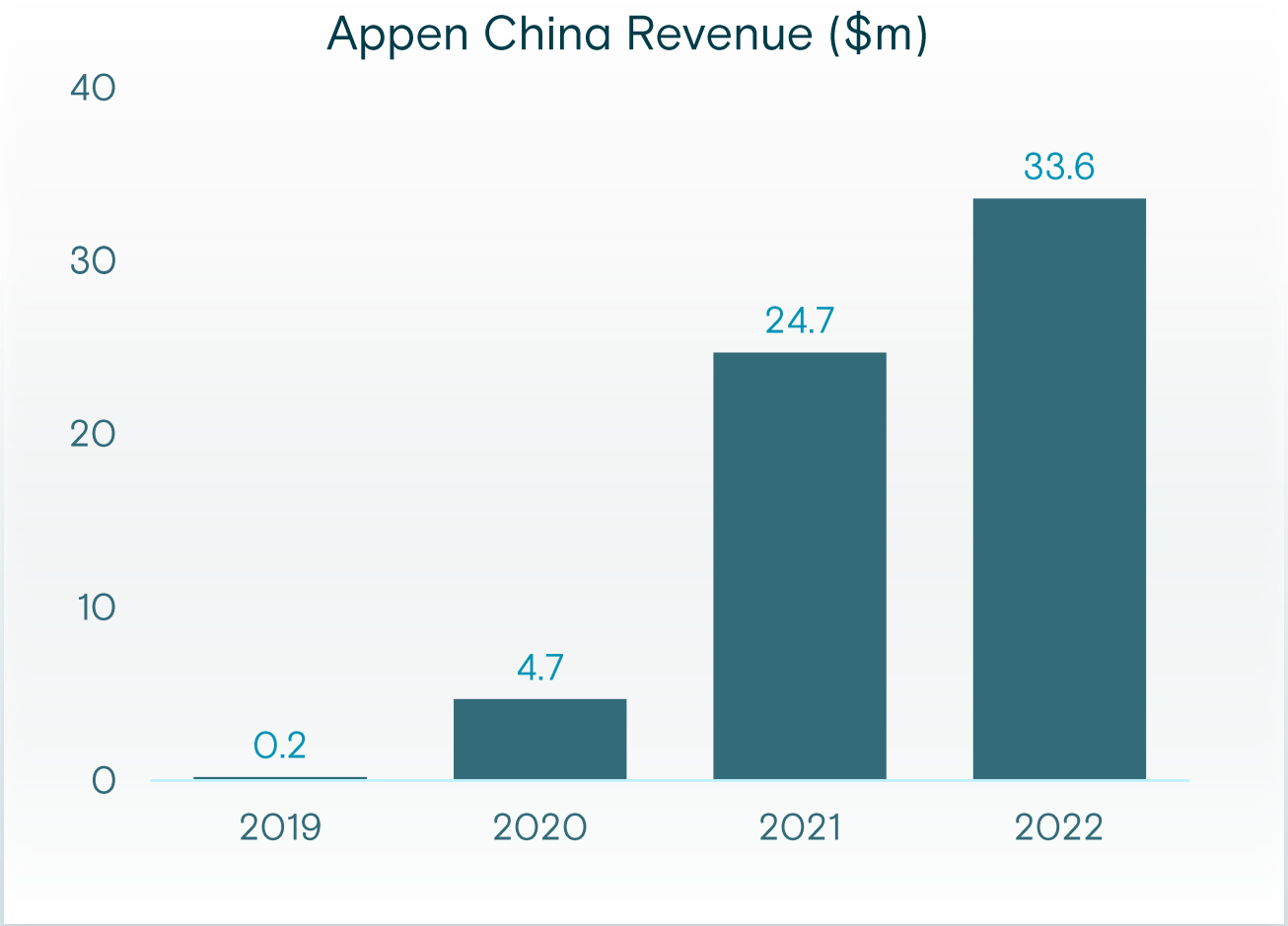
Roc Tian

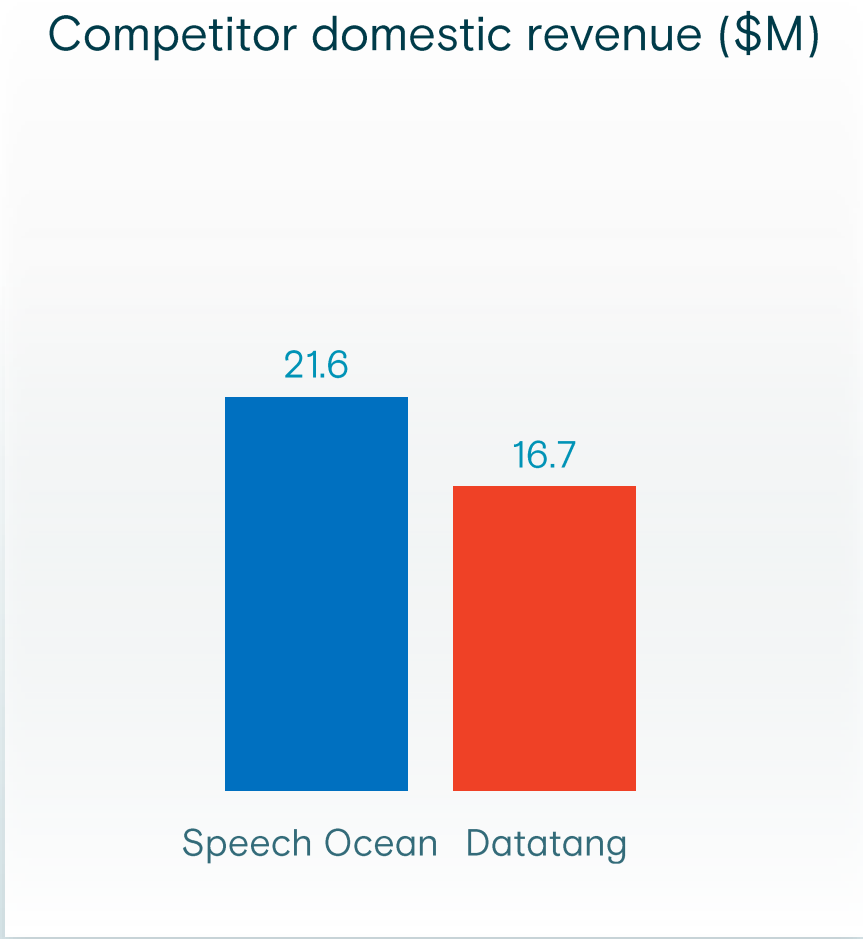
Founder and GM Appen
China

IBM

appen

Appen China journey





Tier 1 customers

10 of 10

Largest Chinese internet companies

10 of 10

Largest Chinese auto companies

5 of 5

Largest Chinese mobile companies

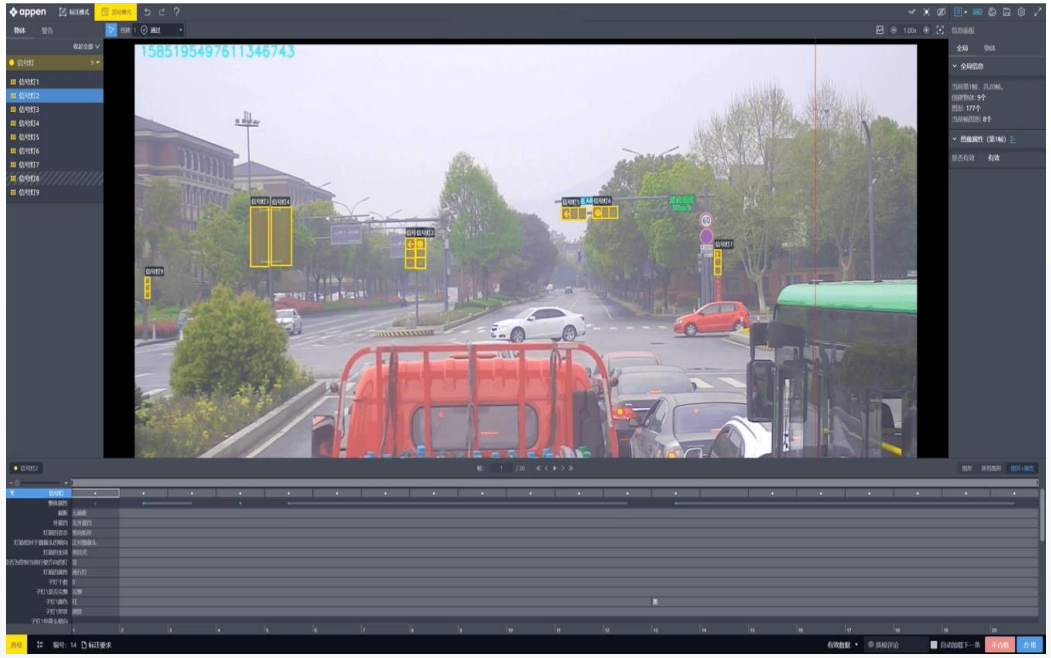
appen

Appen China facilities

Wuxi

Dalian

Chongqing


appen
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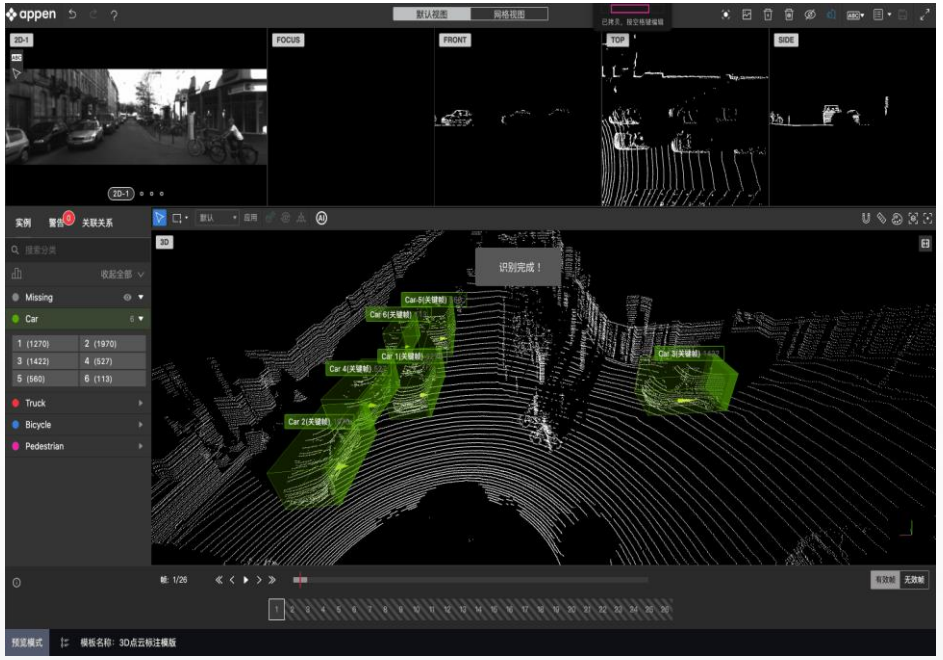
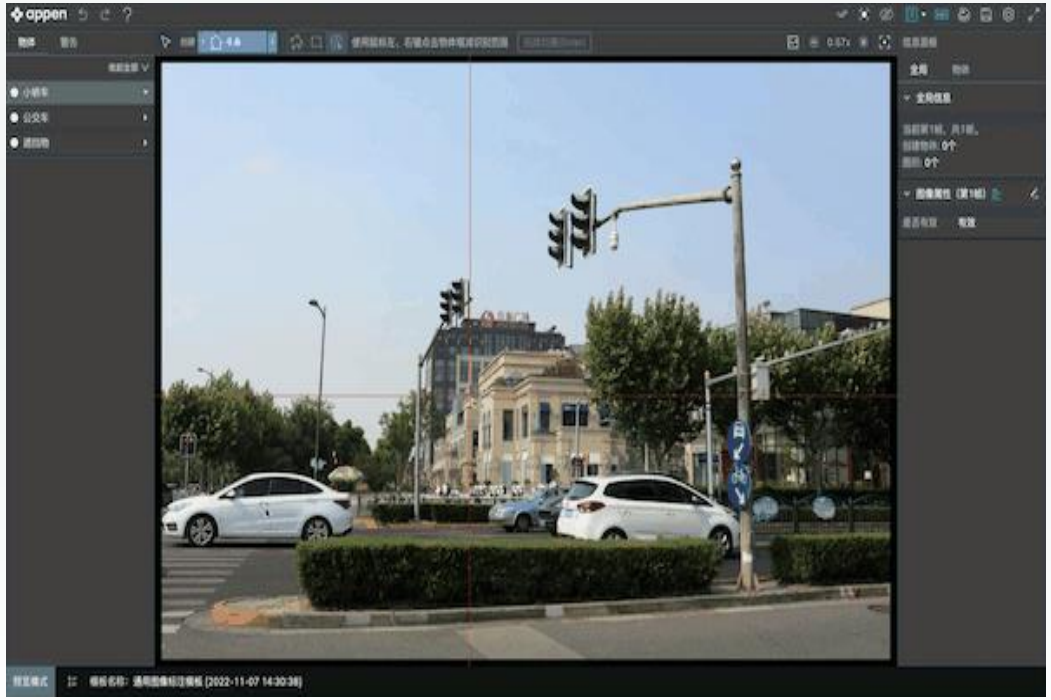
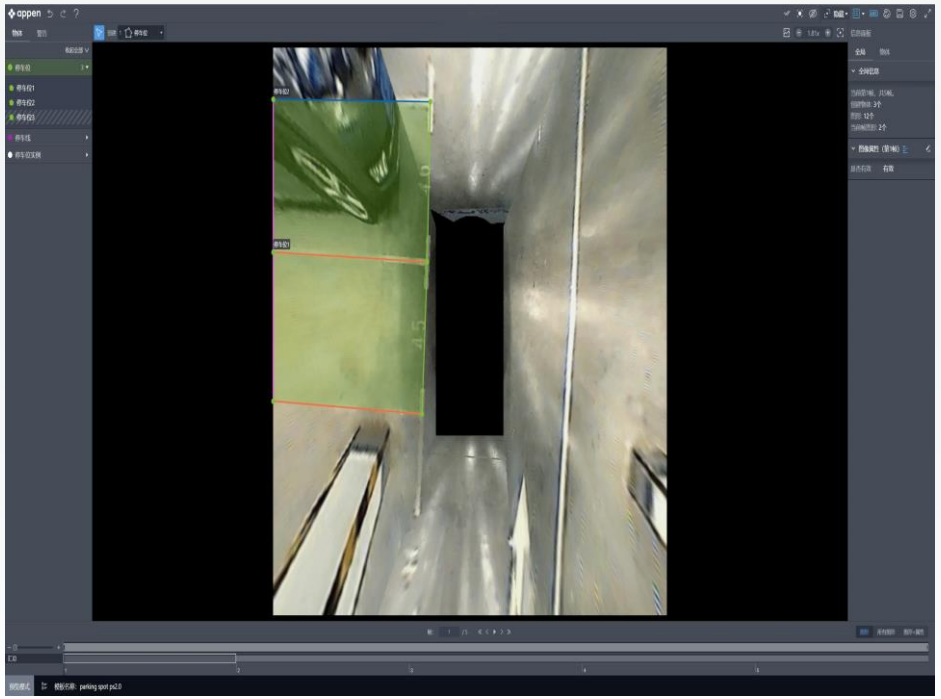

appen
默认视图
网格视图
2D-1
FOCUS
FRONT
TOP
SIDE
实例
警告
关联关系
识别完成！
Missing
Car
Truck
Bicycle
Pedestrian
预览模式
模板名称：3D点云标注模版


appen
小轿车
公交车
全局信息


appen

Appen China growth strategy

Expand within our existing clients

New customer growth

Generative AI

#CultureCode

PURPOSE

We unlock the power of #AIforgood to build a better world.

PERSPECTIVE

We are a learn-it-all culture and embrace that comfort and growth do not coexist.

PROSPERITY

Four **values** unite us

- Customer obsessed
- Courage to innovate
- Action oriented
- Winning together

Armughan Ahmad
Chief Executive Officer

Sujatha Sagiraju
Chief Product Officer

Saty Bahadur
Chief Technology Officer

Mike Davie
Founder and GM Quadrant

Andrew Ettinger
Chief Revenue Officer

Roc Tian
GM China

Helen Johnson
Chief Financial Officer

Ryan Kolln
SVP, Strategy & Innovation

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