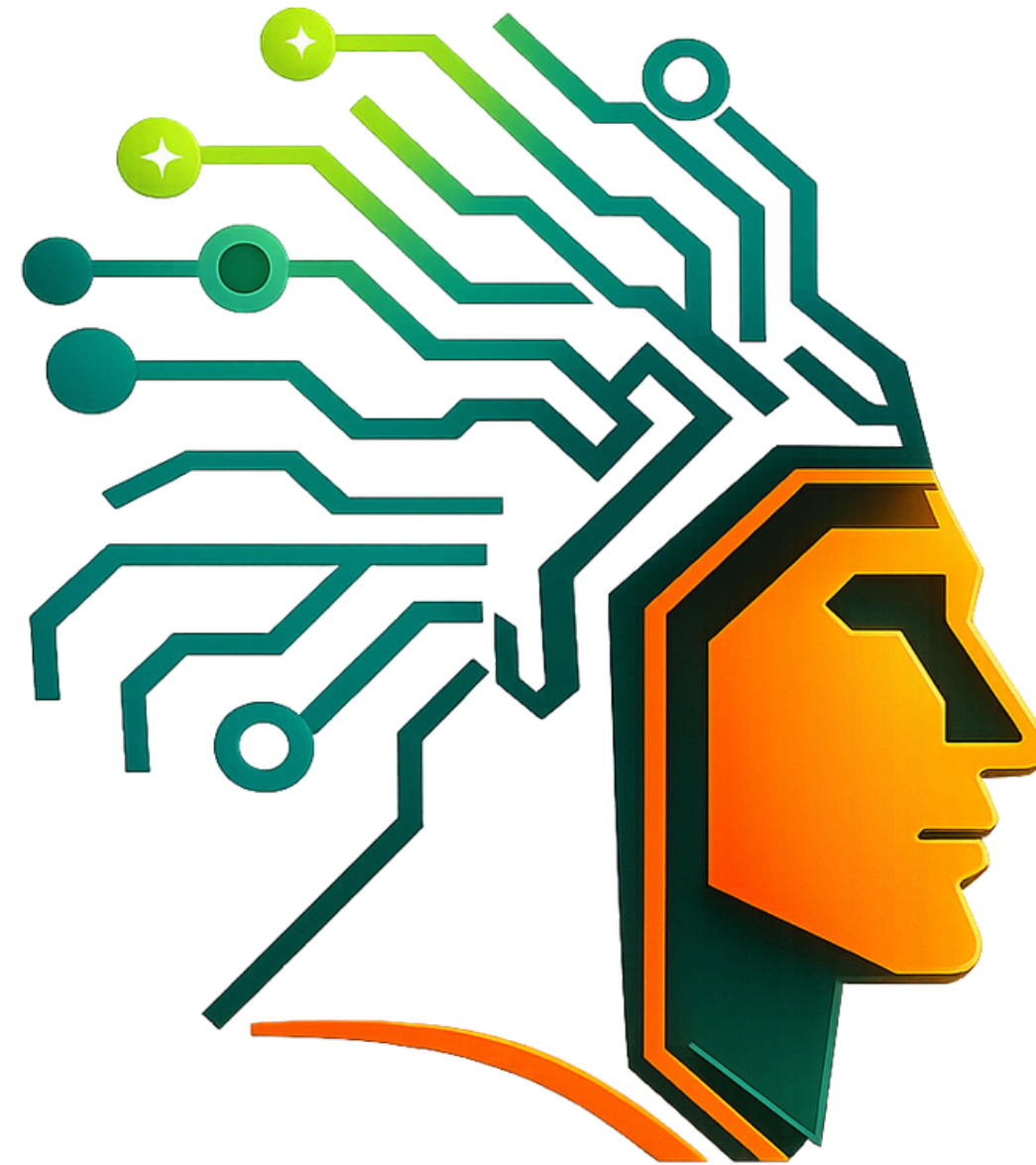




AutoAI-Hub

From Data to Society, Democratizing Machine Learning for Everyone

AI4PEP-BRAZIL



Limited Access to AI Development

Many students, researchers, and professionals lack accessible environments to build, test, and deploy AI solutions, especially in underserved institutions and regions.



High Technical Barriers

Developing AI solutions often requires advanced knowledge of programming, machine learning pipelines, infrastructure, and model evaluation, limiting participation beyond specialized teams.



Inequality in AI Innovation

Access to advanced AI development infrastructure remains concentrated in well-resourced institutions, widening the gap between those who can experiment with AI and those who can effectively create solutions with it.

AI FOR ALL: OVERCOMING BARRIERS



Fragmented and Complex AI Workflows

Data preparation, feature engineering, model selection, evaluation, and deployment frequently depend on multiple disconnected tools, making AI development time-consuming and difficult to reproduce.



Limited Translation of Data into Real-World Solutions

Organizations and communities often have valuable data but lack the technical capacity to transform it into reliable AI applications that address real-world challenges.

AI FOR ALL: OVERCOMING BARRIERS

THE BIGGEST CHALLENGE: AI BUILT FAR FROM OUR REALITIES

Most AI solutions are designed in the Global North, often without understanding the realities of the Global South - overlooking our local contexts, cultures, inequalities, resource constraints, and community needs.

OUR UNIQUE APPROACH

OBJECTIVES



```
graph LR; A[OBJECTIVES] --> B[1. To democratize access to Machine Learning (ML) techniques, allowing non-specialists to use them without the need for knowledge of programming, artificial intelligence, and other disciplines.]; A --> C[2. Monitoring and predicting diseases, and supporting bioinformatics analysis to assist health scientists]; A --> D[3. Combating misinformation and educating communities on the ethical and social use of AI.];
```

1.

To democratize access to Machine Learning (ML) techniques, allowing non-specialists to use them without the need for knowledge of programming, artificial intelligence, and other disciplines.

2.

Monitoring and predicting diseases, and supporting bioinformatics analysis to assist health scientists

3.

Combating misinformation and educating communities on the ethical and social use of AI.

OUR MAIN DREAM

AI truly for all — ensuring that every person, regardless of where they live, their financial resources, or their prior technical knowledge, has the opportunity not only to access AI, but also to understand it, create with it, and benefit from it.

DEMOCRATIZING AI FOR ALL

Engagement with
underrepresented
communities



Public
awareness
campaigns in AI



Open-Source
Initiatives



Community-based
development

Short Courses

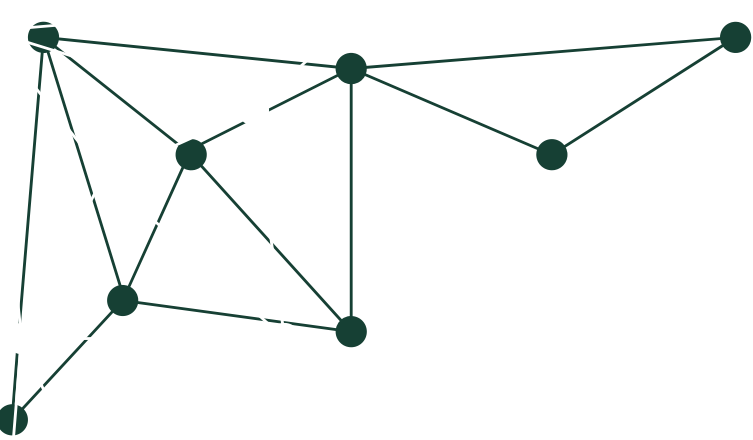


Collaboration
with Industry



International
collaboration





We generate and organize data

Because meaningful AI starts with meaningful local data. Data lakes and structured repositories help preserve, integrate, and make our own realities visible.



We democratize AI development through AutoML

Because having data is not enough. AutoML reduces technical barriers and enables students, researchers, professionals, and organizations to transform data into reliable AI models.

BUILDING A COMPLETE AI ECOSYSTEM



We transform models into real solutions

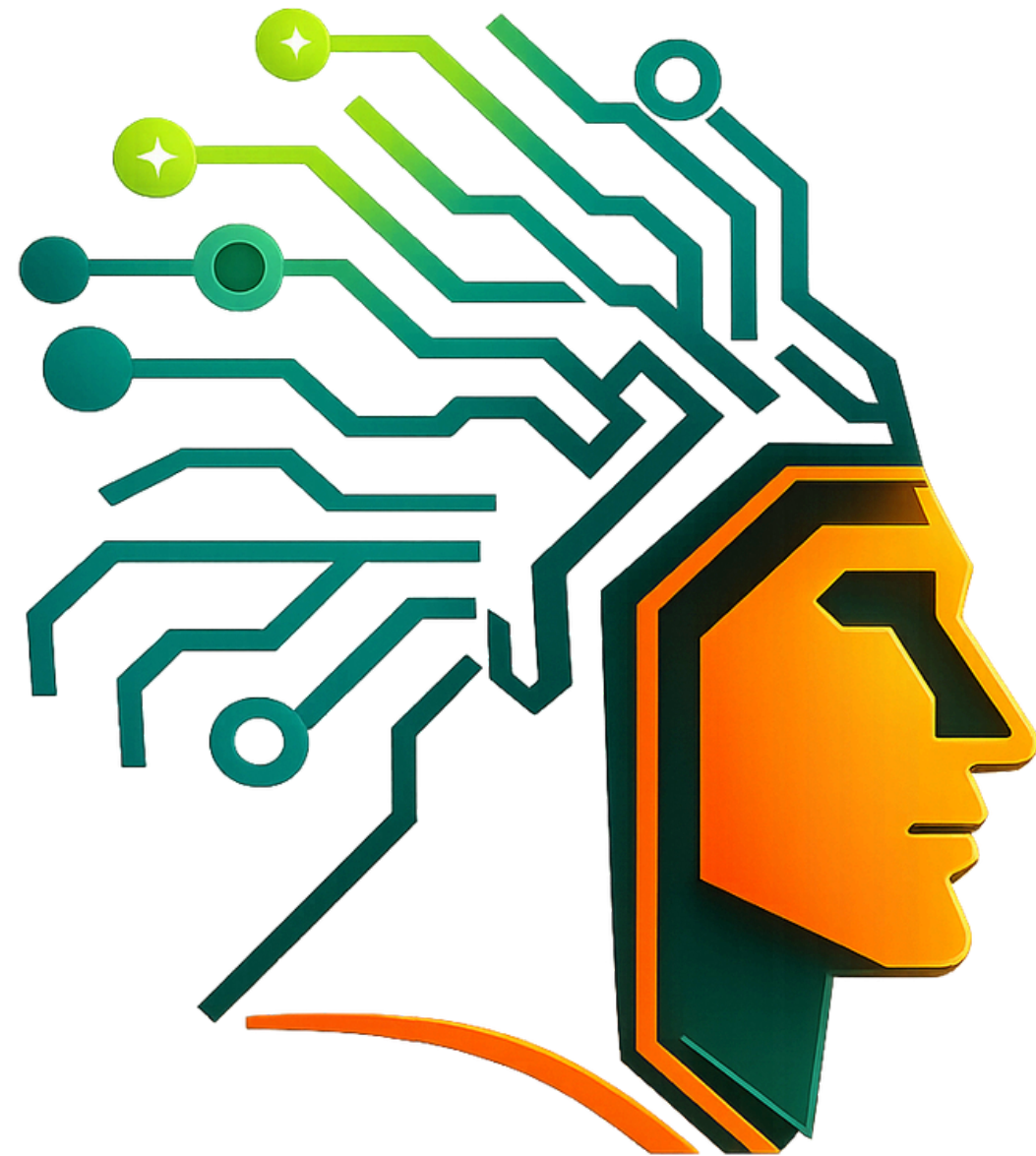
We build usable applications, platforms, and decision-support tools that address concrete challenges in health, education, environment, and society.



We educate people to understand and create AI

Education enables communities to critically understand AI, adapt it to their contexts, and create their own solutions.

BUILDING A COMPLETE AI ECOSYSTEM



**WE GENERATE AND
ORGANIZE DATA**

FIRST PUBLIC HEALTH DATA INFRASTRUCTURE



395,000+

Registered individuals

7,000,000+

Clinical records

5,000+

Brazilian genomes

2,900,000+

Clinical examinations

GUARACI: DIVERSE BASES. ONE PATH.

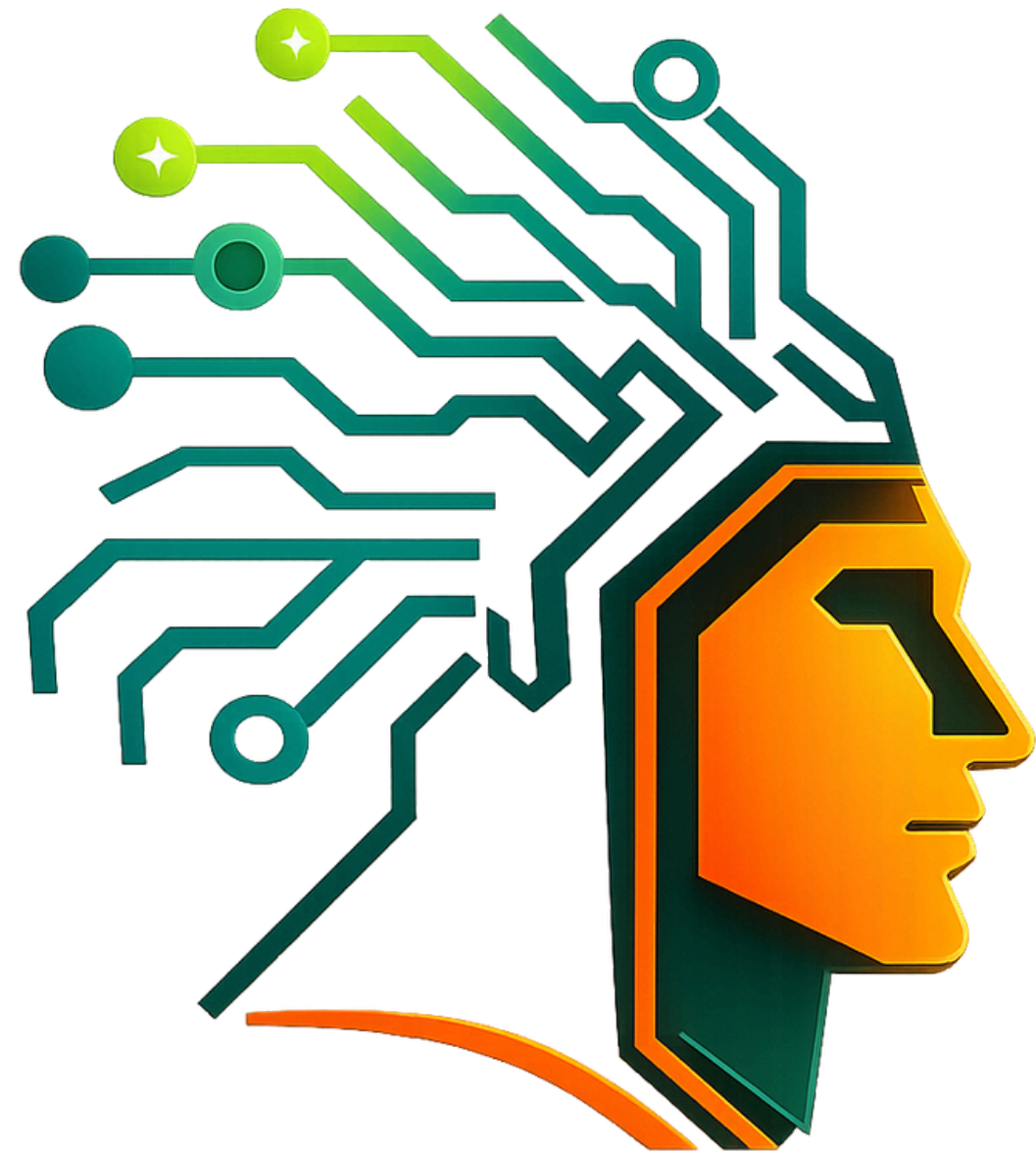


Billions+
health data records

Brazil+
A broad portrait

Guaraci is a download orchestrator : it retrieves public data from Brazil directly from each official source and delivers everything ready to use, with a web interface and fidelity to the original data. Less time searching for databases, more time researching, planning, and creating solutions for the country.

Get started in 5 steps



**WE DEMOCRATIZE AI
DEVELOPMENT THROUGH
AUTOML**

OPEN-SOURCE PACKAGE FOR BIOLOGICAL SEQUENCES



MathFeature

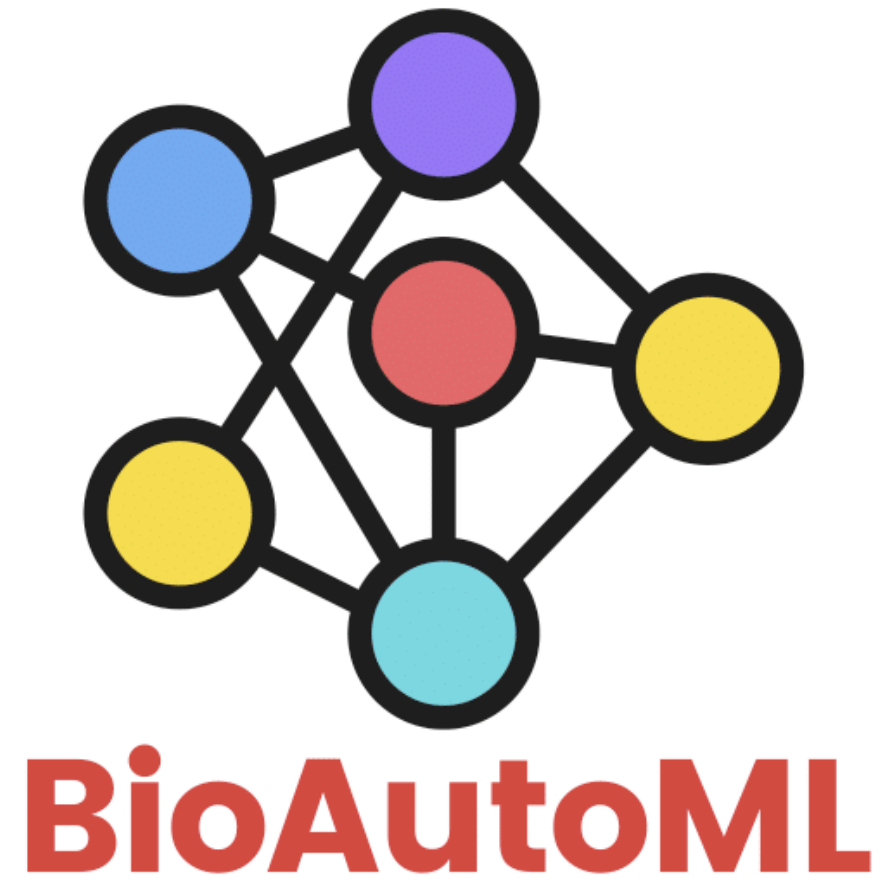
15,000+

Downloads e Views

40+

countries cited our package (at
least 1 researcher - 100+ citations)

BIOAUTOML: END TO END MACHINE LEARNING



IRCAI – UNESCO | Top 10 Global AI Solutions for the SDGs (2025). BioAutoML was selected among the 10 world's most impactful AI initiatives addressing the United Nations Sustainable Development Goals.

50+ citations
from different countries

8,000+
Downloads e Views

10+
Awards and recognitions

BIOAUTOML: END TO END MACHINE LEARNING

[Home](#)[Jobs](#)[Model Repository](#)[Share](#)[Help & Tutorials](#)[About](#)

BioAutoML-FAST

Empowering Breakthroughs in Life Sciences with End-to-End Machine Learning

BioAutoML-FAST, a Feature-based Automated SysTem, is a platform that enables users to upload raw biological sequences and automatically build customised classification models for sequence annotation, or regression models to predict quantitative biological activity, such as expression strength and binding affinity, with optional external validation. The platform summarises datasets through statistical metrics and dimensionality-reduction visualisations. It also includes an extensive repository of 60 trained models spanning diverse biological problems, such as anticancer and antimicrobial peptide prediction, non-coding RNA classification, and even taste prediction.

[HTTPS://BIOAUTOML.ICMC.USP.BR/](https://bioautoml.icmc.usp.br/)

INTERACTIONS BETWEEN BIOLOGICAL SEQUENCES



Top 100 Global AI Solutions for the SDGs (2025).

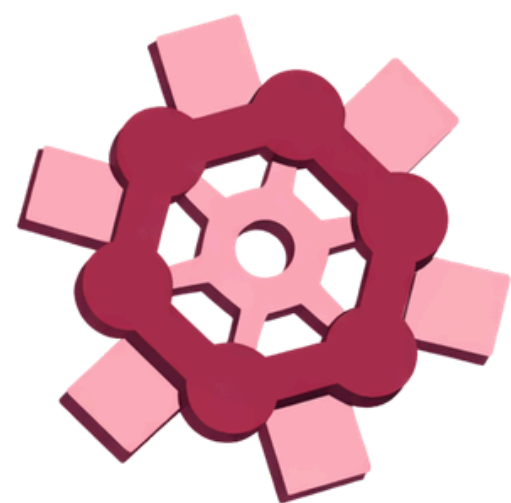
BioPrediction was selected among the world's most impactful AI initiatives addressing the United Nations Sustainable Development Goals.

Selected to participate in
**Prototypes for Humanity
2023, during COP28-
Dubai**, chosen from 3000
entries, from more than
100 countries

40+

Tested across different
application domains

AN OPEN-SOURCE PLATFORM FOR CHEMISTRY

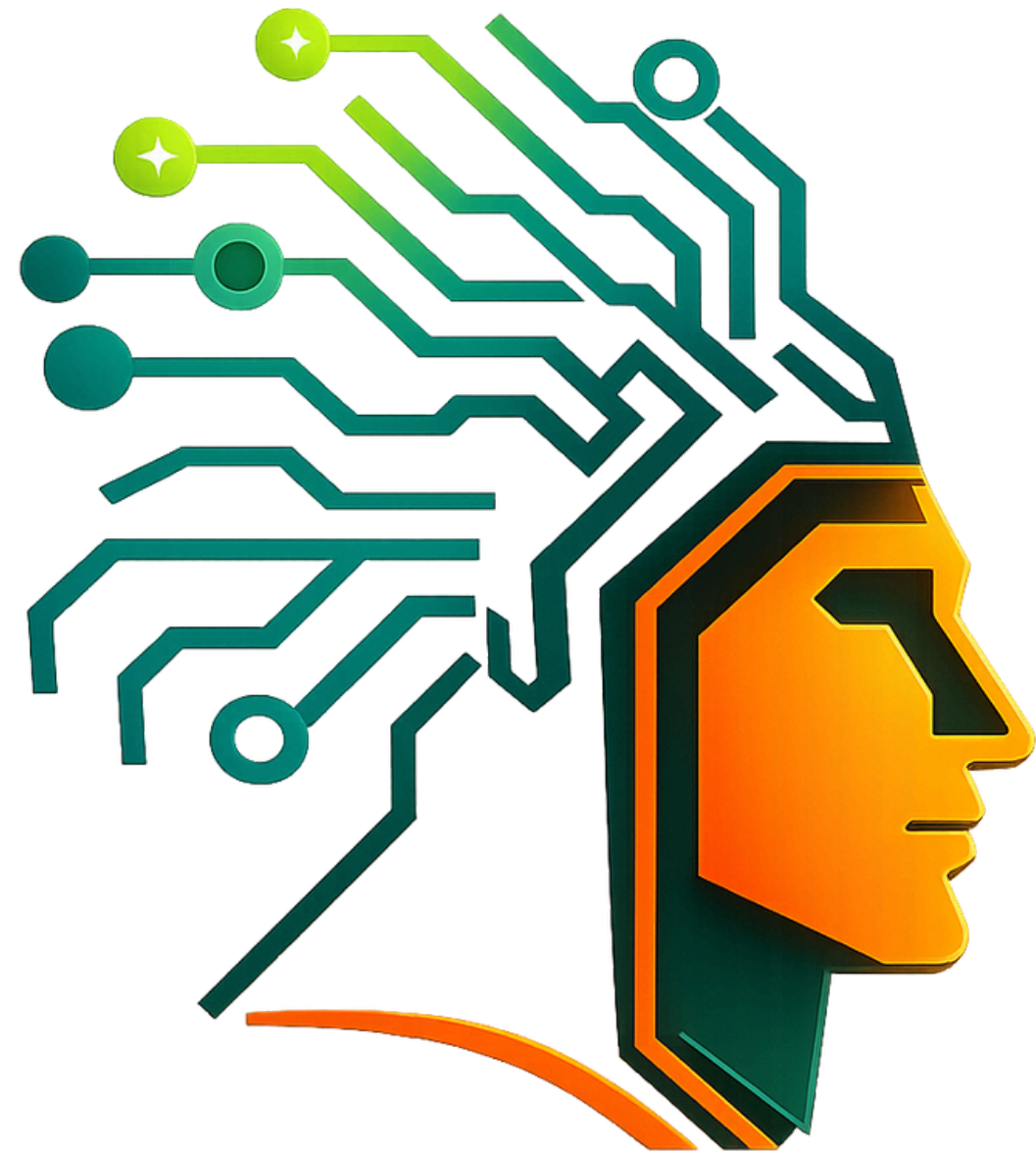


ChemAutoML

Democratizing Cheminformatics

To the best of our knowledge, this will be one of the **largest AutoML platforms** for chemical, biological, and structured data, **developed entirely in the Global South**. It will enable **non-specialists to automatically apply AI** across diverse data types, substantially lowering the technical barriers to AI development and use.

Selected to participate in **Prototypes for Humanity 2025**, chosen from 3,300 entries, from more than 100 countries



**WE TRANSFORM MODELS
INTO REAL SOLUTIONS**

S.N.A.K.E: DIGITAL LITERACY AND REAL-TIME FACT-CHECKING

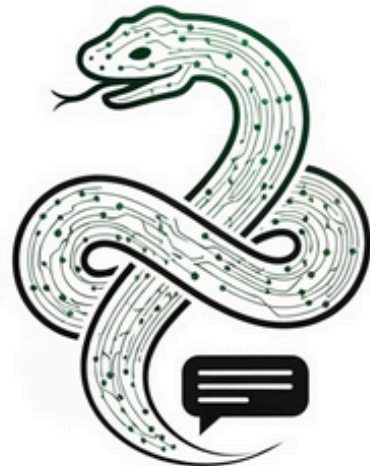
Combate à Desinformação

Analise Notícias com **Inteligência Artificial**

O S.N.A.K.E. é sua ferramenta educacional para análise crítica de notícias. Aprenda a identificar fake news e desenvolva pensamento crítico através de tecnologia avançada.

Começar Análise Gratuita

Saiba Mais



S.N.A.K.E.
System for News Authentication and Knowledge Evaluation

Expert Knowledge-Assisted News System – Your educational tool for critical news analysis and fake news prevention using artificial intelligence.

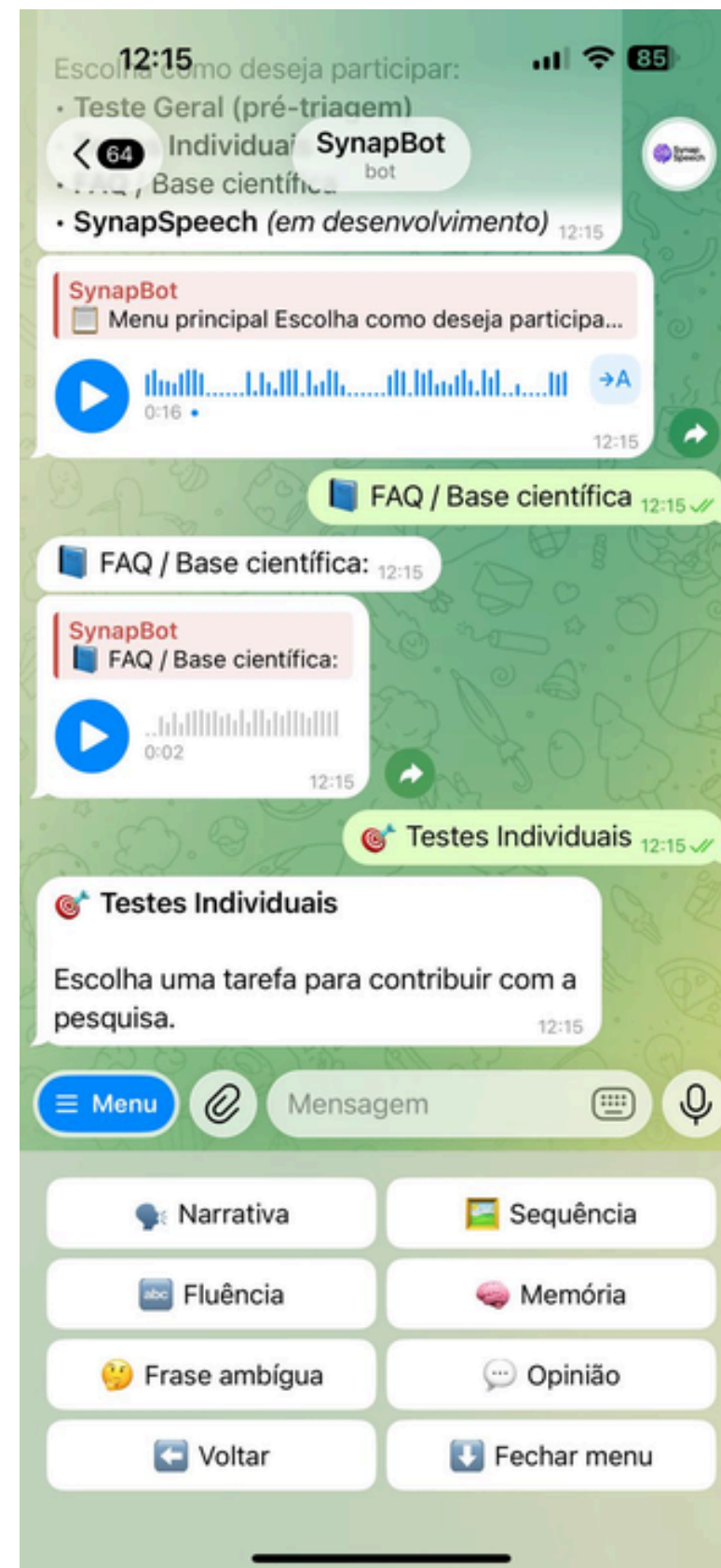
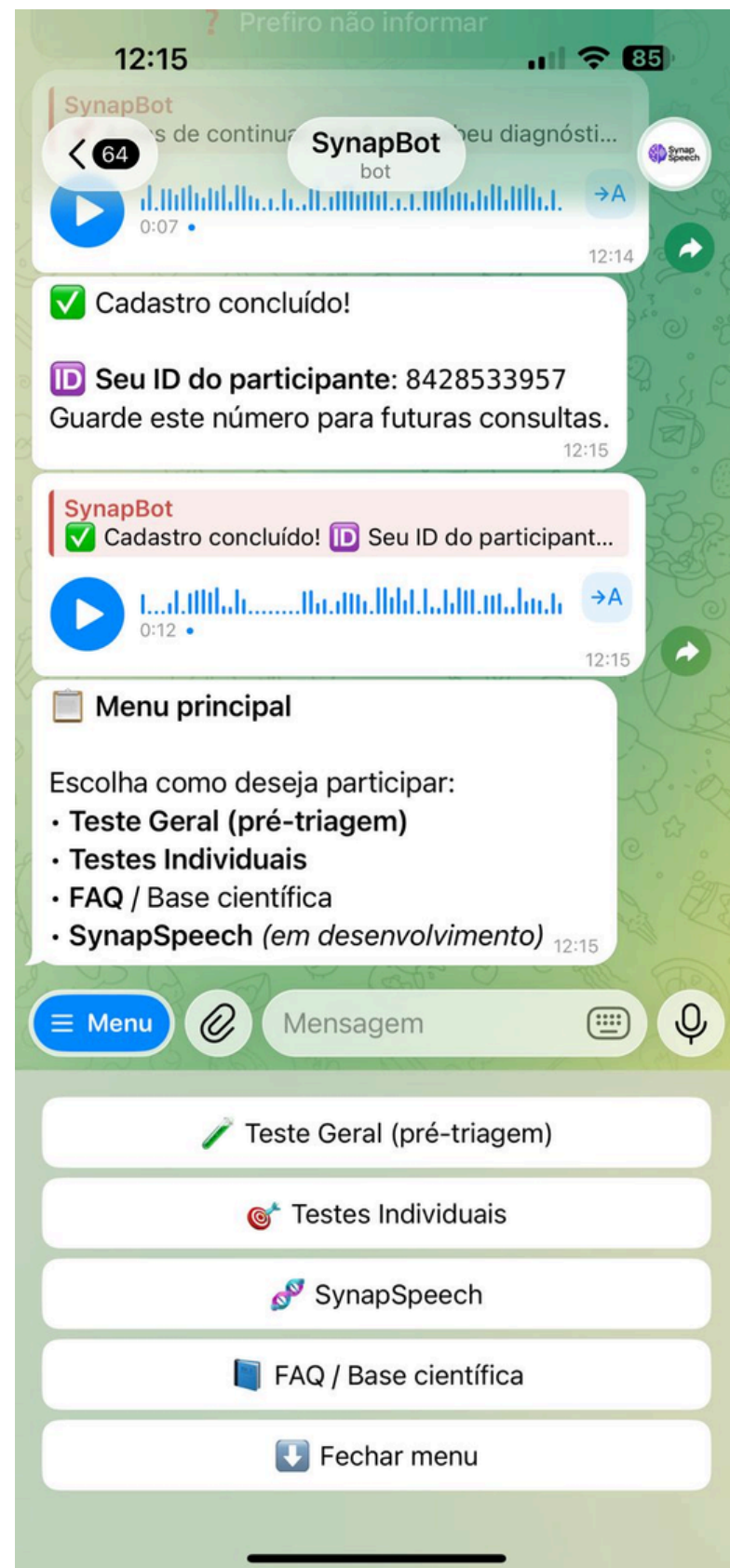
DOMINIQUE - FAKE NEWS DETECTION: TRAINED IN 20,000 NEWS

Open Telegram: Make sure you have the Telegram app installed on your phone or desktop. If not, download it from the App Store

Search for the App: In the search bar at the top, type @ITT_Dominique_bot.

Start the App: Press the Start button.
The app will send you a welcome message and show you the available options.

SYNAPSPEECH: LISTENING TO SIGNALS THROUGH LANGUAGE



A comprehensive pipeline for screening and monitoring cognitive signs associated with Alzheimer's based on spontaneous Brazilian Portuguese speech. Focus on applied, accessible, and low-cost research.

SYNAPSPEECH: LISTENING TO SIGNALS THROUGH LANGUAGE

86%
Accuracy

88%
**(Healthy)
Precision**

82%
**(Unhealthy)
precision**

85%
F1-Score

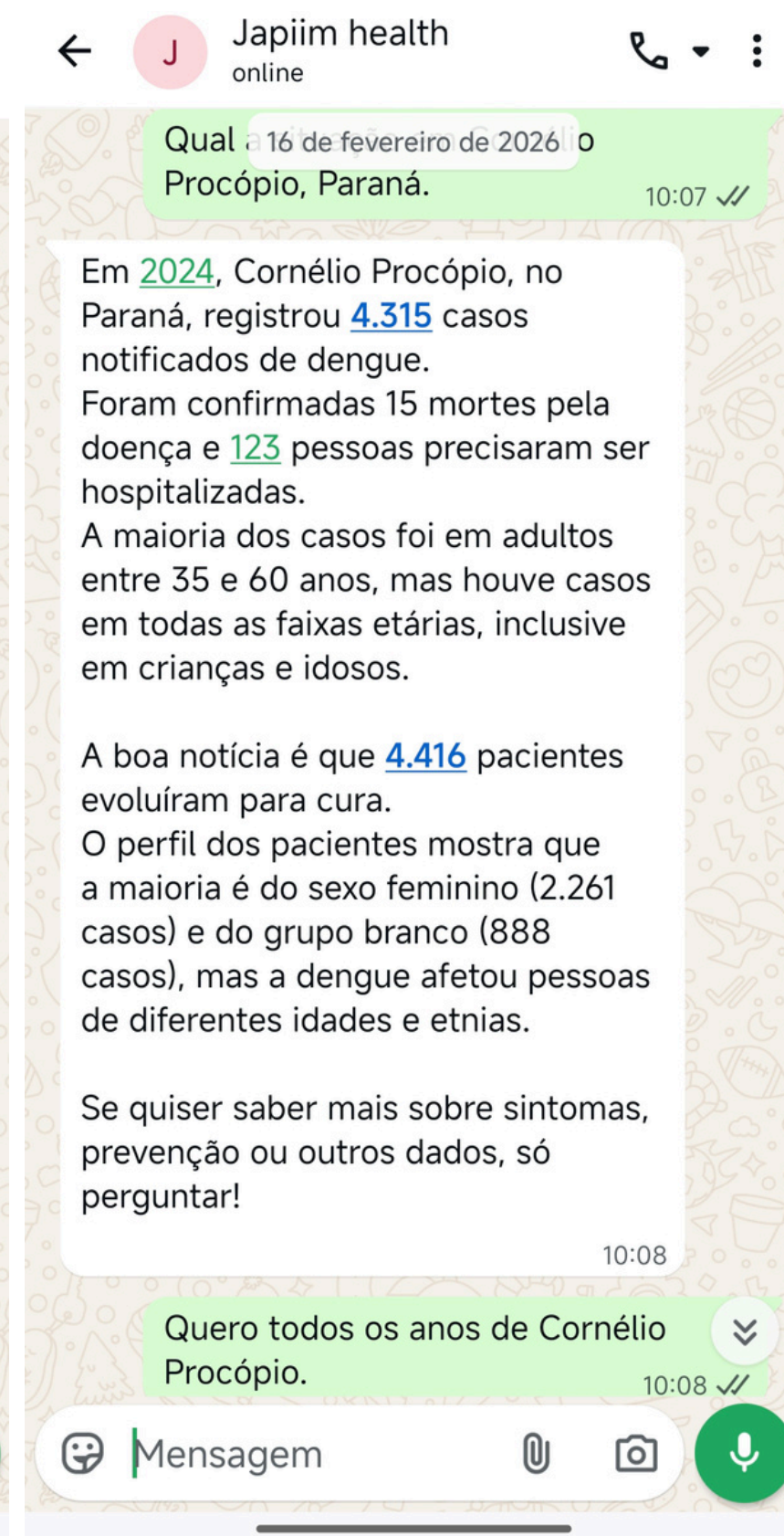
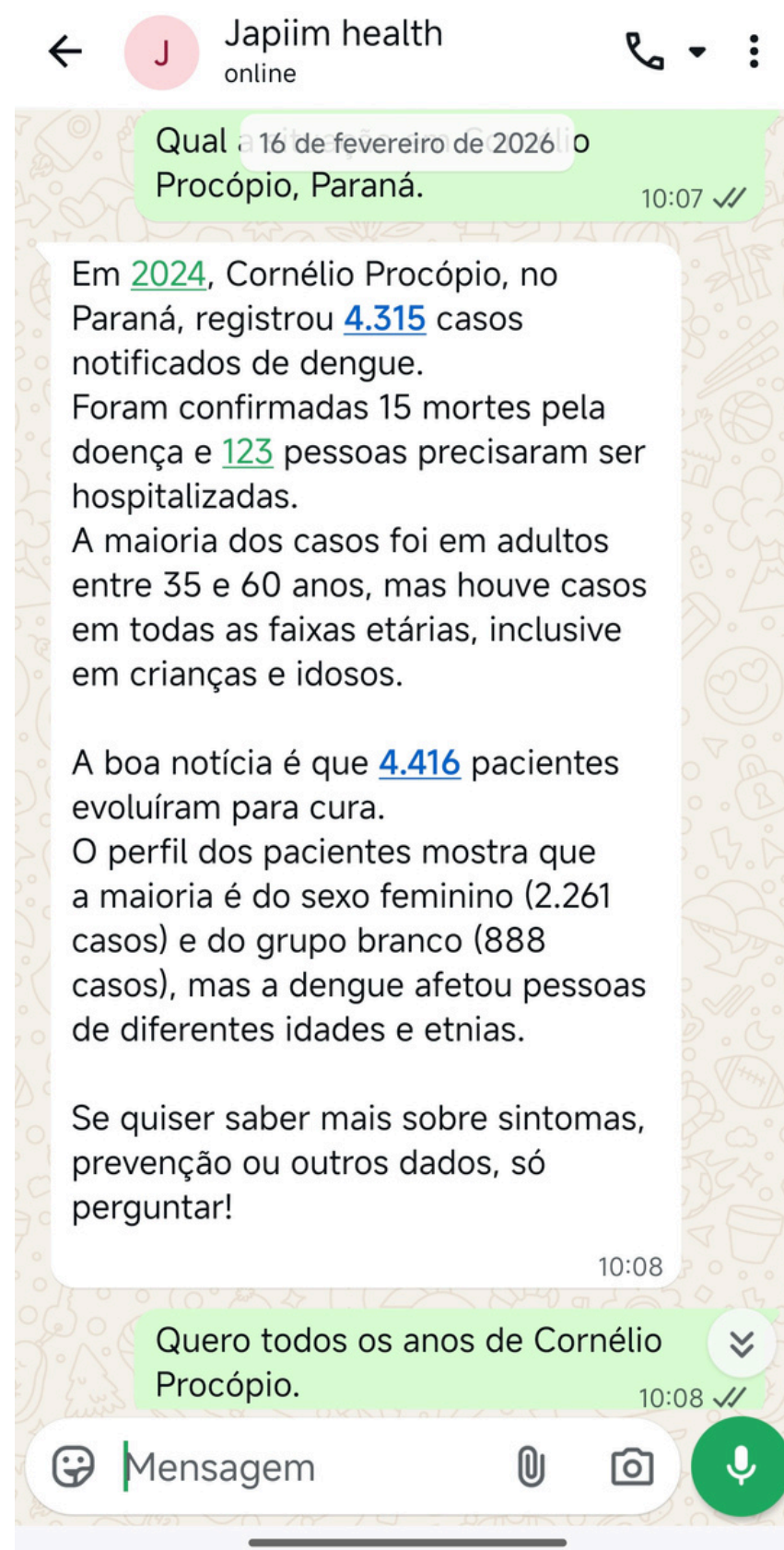
We aim to begin Phase 2 of our experimental validation by building the largest Portuguese-language dataset of its kind, with data from more than 1,000 participants. This large-scale validation will allow us to rigorously assess the reliability and generalizability of our results before making the solution available

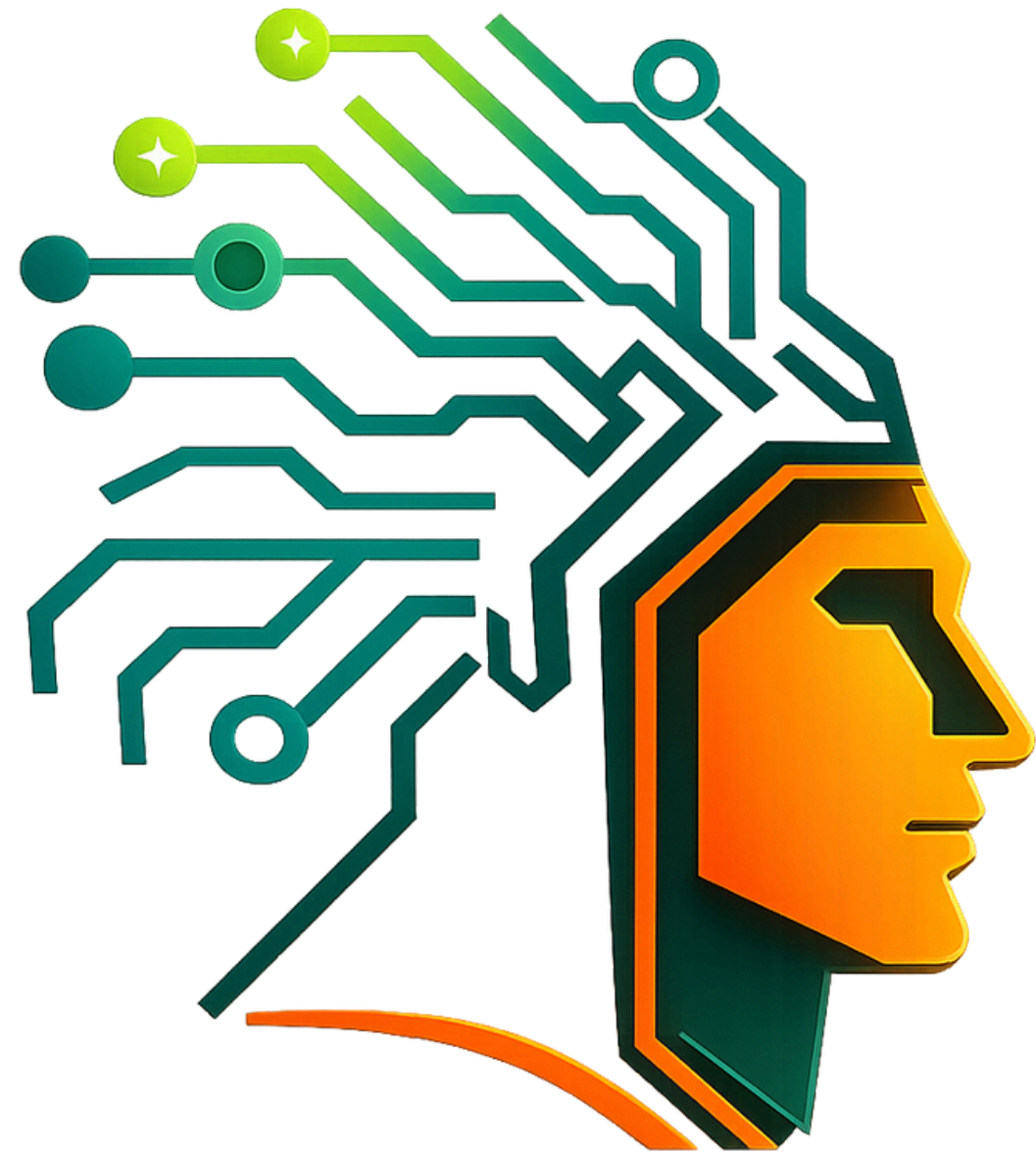
Public Health in the Palm of Your Hand

Japiim translates complex SUS (Brazilian public healthcare system) data into simple WhatsApp conversations. Official, fast, and accessible information for everyone.

Japiim is an Artificial Intelligence Chatbot that "weaves" connections between complex health databases across Brazil to deliver **vital information to those who need it most: you.**

JAPIIM HEALTH





**WE EDUCATE PEOPLE TO
UNDERSTAND
AND CREATE AI**

AI LITERACY FOR ALL



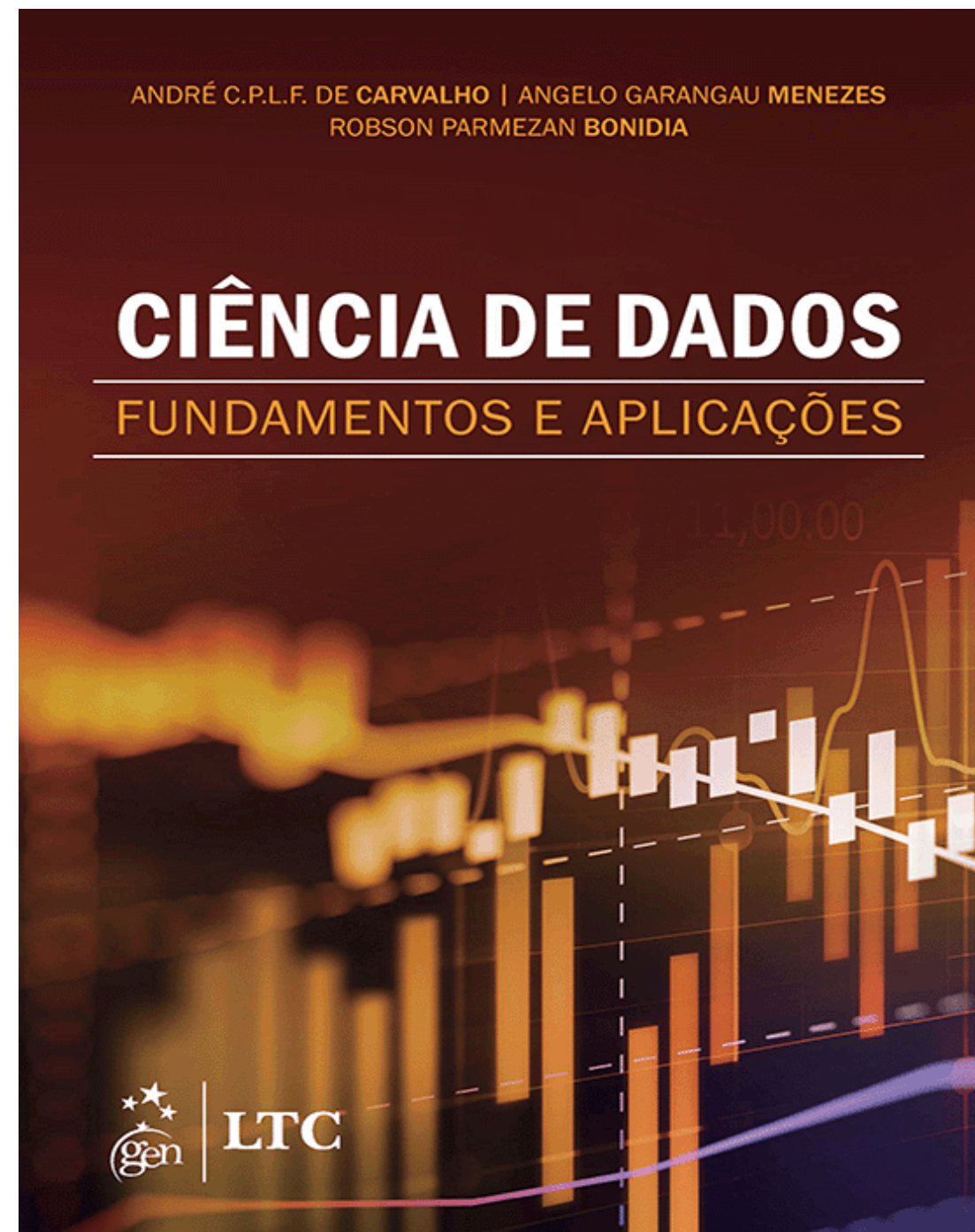
IRCAI – UNESCO | Top 100 Global AI Solutions for the SDGs (2025). InteliGente was selected among the world's most impactful AI initiatives addressing the United Nations Sustainable Development Goals **(Rated Excellent)**

5000+
Qualified individuals

10+
awards and recognitions

Thousands of accesses
to our materials

AI LITERACY FOR ALL



AI LITERACY FOR ALL



OUR IMPACT

300,000+

Accesses, reaching a
broad audience

45+

Awards and
recognitions

300+

Academic citations

50+

Countries have cited our
tools

60+

News published in
media

5000+

Qualified individuals

50+

conference and journal
papers

15+

solutions and projects

1,000,000+

Social media impressions

OUR IMPACT



\$ 3,000,000+ of dollars
in funding secured by the ecosystem

PROTOTYPES
FOR **HUMANITY**



IRCAI Top 100 – Global AI & SDG Index
RESULTS ANNOUNCED



FALLING
WALLS
LAB



Santander X

OUR TEAM



OUR TEAM

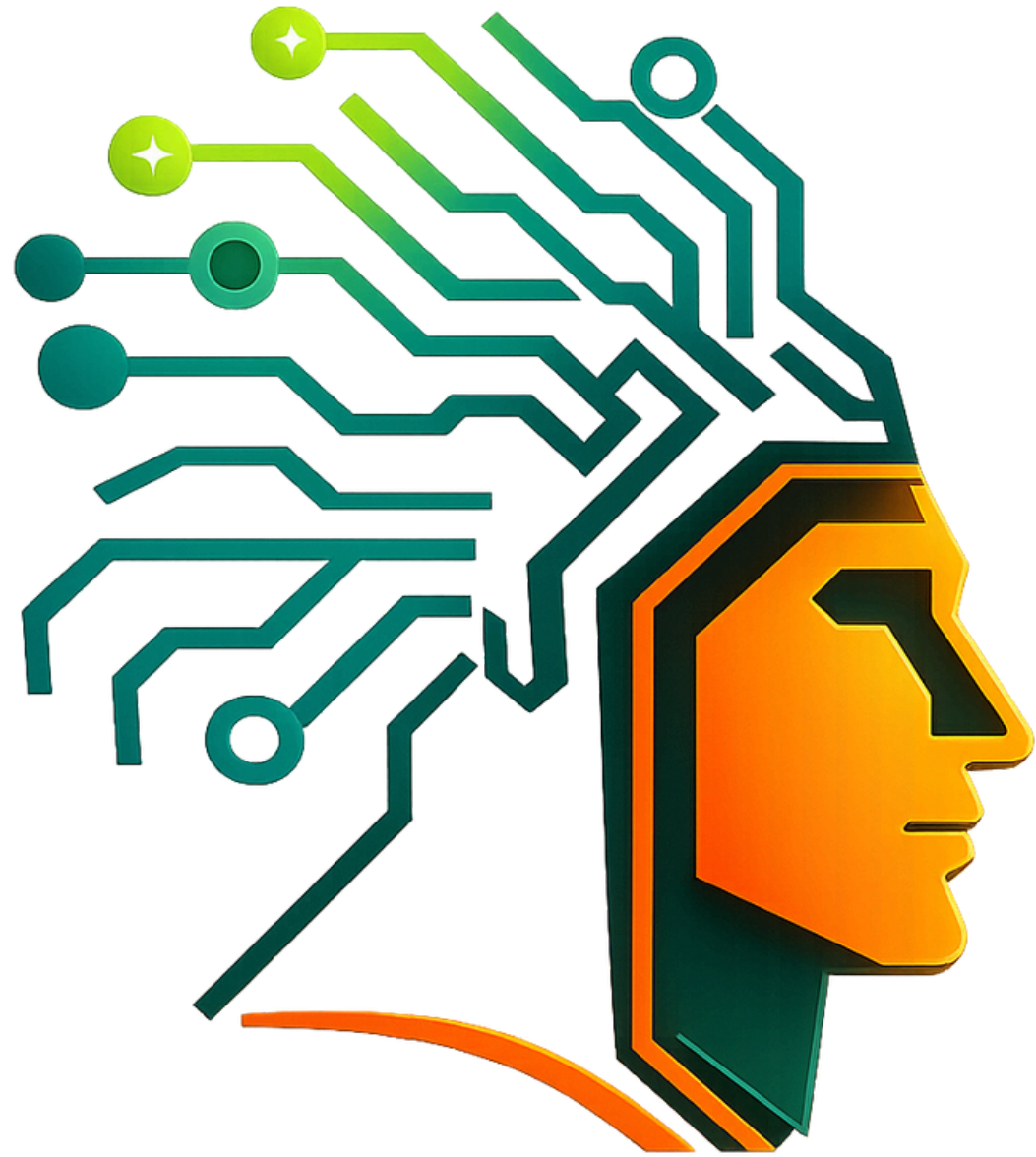


ACKNOWLEDGMENTS



**UK International
Development**

Partnership | Progress | Prosperity



**THANK
YOU!!!**