

Urban Minds

sustainable urban planning



A Brazilian team that always
considers the environment, for
better human well-being in cities.



Our participation

We are participating in the NASA Space Apps Challenge 2025, under the theme "*Data Pathways to Healthy Cities and Human Settlements.*"

Our project proposes a **practical** and **dynamic** solution for urban infrastructure challenges.

Through an **interactive map** integrated with our AI, Aurora, citizens can visualize environmental data and actively engage with their cities.

2025 NASA Space Apps Challenge

Data Pathways to Healthy Cities and Human Settlements



Website Project

To achieve better urban planning, we need to consider global climate change and conditions.

Our mission is to make this information:

01:

Easy to access and understand;

02:

More accessible for everyone;

03:

Always updated and for as many regions as possible.

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About the project:

We all know about the vulnerabilities in ecosystems and natural resources around the world. This problem happens due to environmental issues, such as flooding, extreme temperatures, limitless exploration of Earth resources, among other examples.

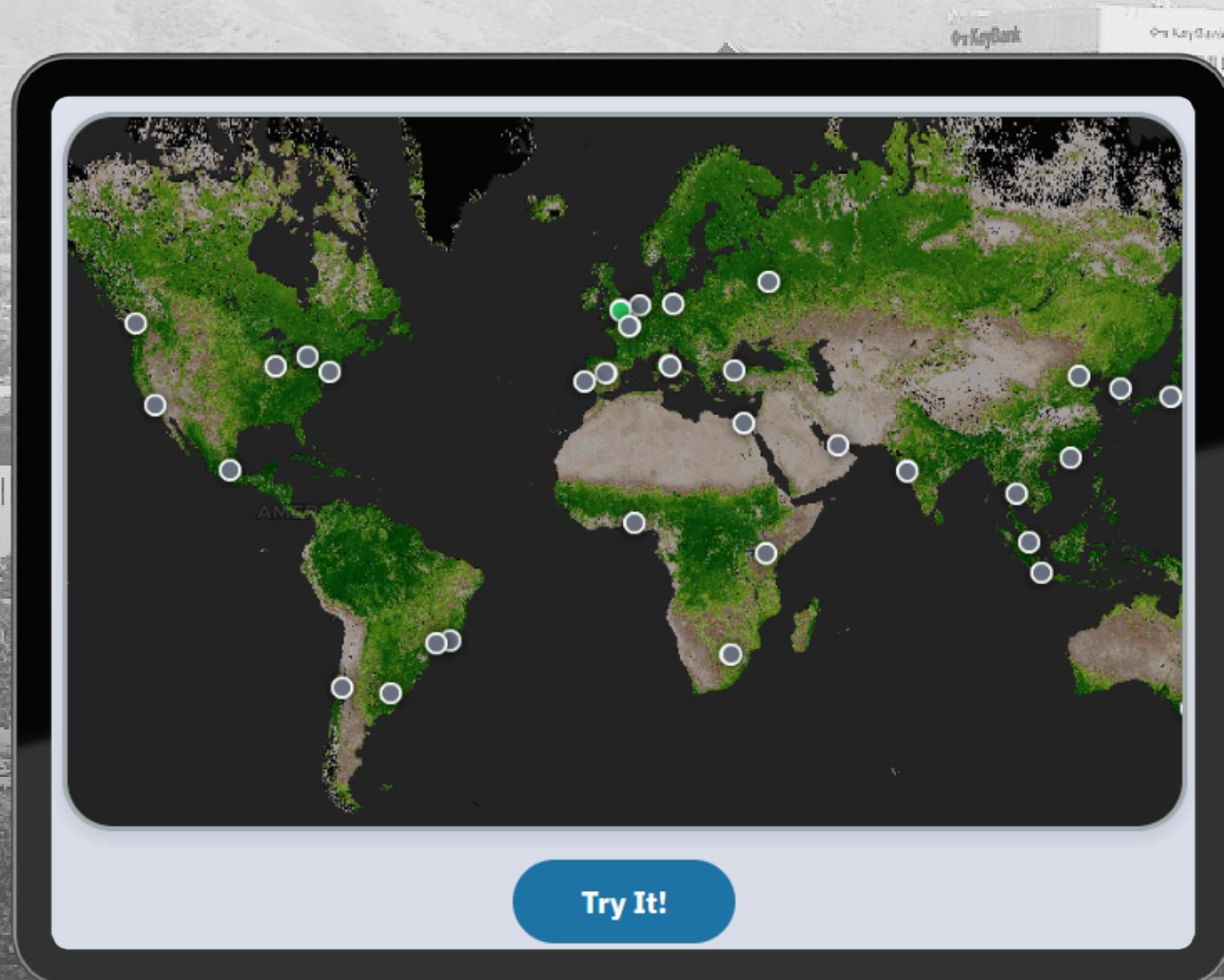
To help city leaders and local parks departments with resolving these issues, we created a website that uses a map with NASA Earth Science data and shows the best method for sustainable urban development in the location the user selects (only a few cities for now), considering improvements in the residents quality of life while in a fast-growing and sustainable city.

With this plan, city leaders can create better eco-friendly development ideas and local parks departments can help with managing the natural resources in areas that will be involved in urban growth. In addition, the website includes a section where users can report problems in their local area. Based on this information, the site provides possible solutions, intending to have information about specific places, supporting even more with local sustainable development.

Home Interact Map



Map Informations:

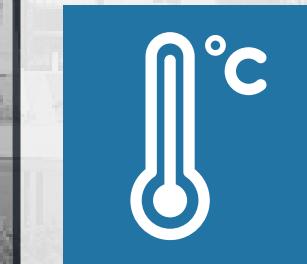


Air Pollution



This category provides information about air quality, including data such as the chemical measurement of nitrogen dioxide concentration per square meter.

Surface temperature



It displays the temperature, in degrees Celsius, of the location selected by the user among the predefined points.

Vegetation index



The amount of green vegetation per area. The Normalized Difference Vegetation Index (NDVI) calculates the difference between near-infrared and red reflectance divided by their sum.

NASA's Open Source Data

The use of NASA tools was essential for our project, due to all the information it has. These tools allow us to observe climate change and global events with high quality data, enhancing our understanding of the processes that impact the planet, being a really valuable source of resources.

NASA Worldview

environmental conditions, such as urban expansion, deforestation, air pollution, and land use changes in the world. And we were able to better understand environmental impacts in urban areas.



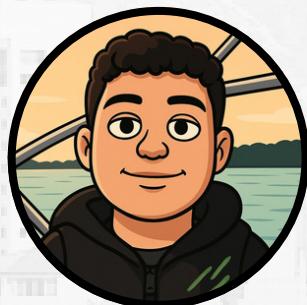
From Data to Action: Empowering Urban Communities

We are tackling the 'Data Pathways to Healthy Cities and Human Settlements' challenge with a dynamic solution. Our project features an interactive map powered by our AI, Aurora, giving citizens real-time access to urban data like air quality and energy use. The platform encourages active community participation for reporting issues and suggesting improvements.

Aurora analyzes this data to provide personalized suggestions, empowering citizens to become co-creators of sustainable, resilient, and healthier urban futures.



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