7/7/2022

Série Brasil Inova

5G promises to raise Brazil's GDP and productivity

The arrival of 5G, the most advanced technology for fast internet connectivity, should trigger a process of modernization in several sectors. The National Telecommunications Agency (Anatel) foresees the start of operation of the system later this month in Brasília, and until the end of August in the other capitals.

According to the estimation of the International Data Corporation (IDC), 5G has the potential to move US$ 25.5 billion in Brazil by 2025, considering only the impulse of technologies such as artificial intelligence, Big Data & Analytics, Cloud, security, augmented reality and virtual AR/VR, Robotics and Internet of Things (IoT).

According to the studies of the Brazilian National Confederation of Industry (CNI), the large-scale application of the new technology can increase the GDP per capita by up to 0.20 percentage points in 2030, which is equivalent to an increase of R$ 81.3 billion.

Similarly, the spread of 5G networks will allow the large-scale use of data and artificial intelligence to increase productivity. Once widespread, the technologies should become accessible to small and medium producers.

Learn more at: https://www.correiobraziliense.com.br/economia/2022/07/5019510-5g-promete-elevar-pib-e-produtividade-do-brasil.html?fbclid=IwAR26i8uYAsb0LnoJJuTE9biIJtjXI6E2VnbrdHo-i0o4nhZobNuZvpQ93kQ

12/7/2022

Série Brasil Inova

Researchers from the University of Turku have described seven new fern species from the rainforests of tropical America.

Researchers from the Amazon research team of the University of Turku have a long history of discovering species previously unknown to science. Now they have described seven new species of tropical ferns – six of the genus Danaea and one of the genus Dennstaedtia.

Most of the specimens used to describe the new Danaea species were collected decades ago, some already in the 1800's. The fern specimen that triggered describing the new Dennstaedtia species was collected 15 years ago by Gabriela Zuquim, a Brazilian researcher at the University of Turku and a member of the Amazon research team.

Many of the species were uncovered as the by-product of ecological research: the species diversity in tropical forests is still so poorly known that field trips and herbarium work keep discovering previously unknown species.

“Understanding how to identify the different species and where each of them grows is important for ecological and other research. Information is also needed for setting conservation priorities, as on the long term, the survival of species depends on the conservation of their natural habitats. To

prevent biodiversity loss, it is important to protect areas that have special habitats and unique species", says Professor Hanna Tuomisto.

Learn more at: https://www.utu.fi/en/news/press-release/hidden-in-plain-sight-seven-showy-tropical-forest-ferns-described-as-new-to?fbclid=IwAR0RjTc7Zg-ybuVIgx8algSDEusasSitUv5mSIgIXVge54lyPg7pLavAxmY

20/7/2022

Série Brasil Inova

Best universities in Latin America

If you are looking to study at one of the top universities in Latin America, heading to Brazil might be your best bet, based on the results of the 2022 Times Higher Education (THE) Latin America University Rankings. The country has an impressive 72 universities in the ranking that includes 197 institutions in 13 countries. The number is an improvement from last year, when Brazil took 67 places in the ranking.

Despite Brazil being the most-represented country in the ranking, the top university for the third consecutive year is the Pontifical Catholic University of Chile; Brazil's University of São Paulo comes in second place. The rest of the top five comprises the University of Campinas (ranked third) (Brazil), the Universidade Federal de São Paulo (UNIFESP) (Brazil), in fourth place, and the Monterrey Institute of Technology (Mexico), in fifth position.

The performance indicators are grouped into five areas: teaching (36%); research (34%); citations (20%); international outlook (7,5%); and industry income (2,5%). According to THE, "Brazil outperforms the Latin American average on most metrics except citation impact and international metrics and has made significant improvements in research quality and quantity."

Learn more at: https://www.timeshighereducation.com/student/best-universities/best-universities-latin-america?fbclid=IwAR2Xi4GOmxeaC0jWR4yMrgnldD-6CcxETNPbjO05T06Al4K8XUTbcSCbIOQ

25/7/2022

The Brazilian Startup Association, ABStartups, now has a newsletter in English! If you're interested in receiving a regular report with a selection of news and analysis on Brazilian and Latin American startups, sign up for the newsletter at: https://bit.ly/startupsinenglish.

26/7/2022

Série Brasil Inova

The Global Startup Ecosystem Report 2022: São Paulo

According to the GSER 2022, Latin America was the fastest growing region in the world in terms of venture funding in 2021. An estimated $19.5 billion was invested in the region, more than triple the prior year's already record-setting levels, and there were 300% more exits over $50 million in 2021

than in 2020. Fintech, transportation and logistics, and e-commerce are largely driving this growth. Two Brazilian innovation ecosystems are singled out in the report: São Paulo and Rio de Janeiro.

São Paulo is the largest startup ecosystem in Latin America and occupies the 28th position in the global ranking, after Philadelphia and Delhi, having risen three positions from last year. This, in part, reflects the creation of 12 unicorns and 2 exits of more than $2 billion, including Fintech Nubank with an IPO of $41 billion in December 2021.

São Paulo is also the Latin American base for many of the world's biggest banks, improving access to capital for the city's growing companies. São Paulo boasts a number of homegrown VC firms, including Kaszek and Positive Ventures. The report highlights the strength of the local ecosystem in the subsectors of fintech, proptech and agtech & new food. Currently, São Paulo is home to 2,770 startups, the highest number by far in Brazil, including 11 unicorns valued at $1 billion or more.

Learn more by reading the full report at: https://startupgenome.com/report/gser2022.

27/7/2022

Série Brasil Inova

The Global Startup Ecosystem Report 2022: Rio de Janeiro

According to the GSER 2022, Latin America was the fastest growing region in the world in terms of venture funding in 2021. An estimated $19.5 billion was invested in the region, more than triple the prior year's already record-setting levels, and there were 300% more exits over $50 million in 2021 than in 2020. Fintech, transportation and logistics, and e-commerce are largely driving this growth. Two Brazilian innovation ecosystems are singled out in the report: São Paulo and Rio de Janeiro.

Rio de Janeiro is the 1st Latin American Ecosystem in Knowledge, the 4th in Talent & Experience and among the 5 best regions in Latin America in Performance. The city has invested in improved security, 4G connectivity and better transportation links in recent years, helping Rio take part in Brazil's startup boom.

Rio de Janeiro is also taking strides towards becoming a global Blockchain hub. It is set to become the first Brazilian city to accept property tax payments in crypto in 2023 and is also considering offering a discount of 10% on property taxes paid with Bitcoin. There are plans for a new municipal committee for crypto investments and, in January 2022, Rio de Janeiro announced that it would hold 1% of its treasury in cryptocurrency.

There is a steady flow of talent, local accelerator programs such as Entropia and government-backed Rio Criativo, and potential investors, thanks in part to Rio de Janeiro being a center for the oil and gas industry.

Learn more by reading the full report at: https://startupgenome.com/report/gser2022.

28/7/2022

The Brazilian Game Industry Report 2022 by Abragames and ApexBrasil

According to the recently published report, the Brazilian game market is the most important within Latin America. Most recent estimates indicate that Brazil exceeded US$ 2,3 billion in revenue in 2021, making the country the 10th largest game market in the world.

In the last four years alone, the number of game development studios in the country grew from 375 to 1,009, an increase of 169%. The biggest Brazilian game developers are Wildlife (considered a unicorn), Afterverse, Aquiris, Fanatee, Puga, Sioux, Kokku, Gazeus, Pipa and Tapps. Regarding the geographic distribution of studios, 57% are clustered in Southeast Brazil, 21% in the South, 14% in the Northeast, 6% in the Midwest and 3% in the North. Brazil is also home to several multinationals in the digital game ecosystem.

The main source of revenue is mostly entertainment (76%), followed by educational games (12%) and advergames (6%). Considering all the games developed locally between 2020 and 2021, smartphones and tablets are the platform of choice, followed by PCs and consoles.

In 2021, 57% of the developers had international revenues. Currently, the main markets are USA, Latin America, Western Europe and Canada. Furthermore, 12% of the companies have representatives and 9% have a properly established company abroad, while 2% have their own offices and another 2% have development facilities abroad.

Learn more from the full report, available both in English and in Portuguese at: https://www.abragames.org/pesquisa-da-industria-brasileira-de-games.html?fbclid=IwAR1PLKPUPkvsKYm3xtKyLu3ux2Dhr0jMapEH4-Mf-mEqOKLcth58re-hNdI

4/8/2022

Série Brasil Inova

Angel investors unite to support startups founded by women

Only 4.7% of Brazilian startups have a team made up only of women, and 0.04% of them get investments to develop the company. Data such as these inspired the creation of Sororitê, a network of female angel investors that supports companies founded by women to get their first investment.

Led by Flávia Mello, Erica Fridman Stul, Mariana Figueira and Jaana Goeggel, the network has more than 70 investors with experience in different areas that evaluate startups in early stages (pre-seed) in a comprehensive way.

According to the experience of Sororitê's founders, women receive a much more negative treatment than men in interviews that are decisive when approving a company for investment. Another important point is the lack of similarity: often, businesses created by women seek to solve problems experienced in the daily lives of women, and these are not always understood by men. Sororitê seeks to give these startups a fair chance to make their pitch to the investors, after going through a process of evaluation.

In one year, Sororitê has already raised R$3 million for eight startups, including HerMoney, Feel, SleeUp and Mimo. For 2022, the objective is to reach R$ 10 million.

Learn more at: https://forbes-com-br.cdn.ampproject.org/c/s/forbes.com.br/forbes-money/2022/07/investidoras-anjo-se-unem-para-apoiar-startups-fundadas-por-mulheres/?amp&fbclid=IwAR1BlK_6mLIUX8dEOKpK-djFHlHFR1c1Nrd2u_GJeJ6OgOgoc6P51UCHOuY

11/8/2022

Série Brasil Inova

New telescope will detect highest energy radiation produced in the Universe

Astronomers from Brazil, Italy and South Africa have begun installing the first of nine Cherenkov telescopes at the Observatório del Teide in Tenerife, Spain, which will be able to detect the highest energy radiation produced in the Universe: extreme energy gamma rays.

Installation of the complete array of nine telescopes is expected to be completed by the second half of 2023 and the first astronomical images are expected to take place in 2024.

Brazilian researchers have been participating in all stages of construction of the first telescope, supported by FAPESP within the scope of a Thematic Project. According to Elisabete de Gouveia Dal Pino, a professor at the Institute of Astronomy, Geophysics and Atmospheric Sciences at the University of São Paulo (IAG-USP) and coordinator of the project, “Brazilian participation in this project is of great strategic importance for Brazil because it allows the country to start developing instrumentation for multifrequency astronomy”.

Learn more at: https://agencia.fapesp.br/novo-telescopio-ira-detectar-radiacao-de-mais-alta-energia-produzida-no-universo/39252/?fbclid=IwAR2O7Qr48b0SIgz0xVdJtYjddwvr7exD07diFU-ml28cLqJoFEOwKiZU5_Y

17/8/2022

Municipality of Sao Paulo and C40 Cities launch International Competition to regenerate public spaces in downtown SP

“Reinventing Cities São Paulo” will select urban projects to regeneration four public open spaces and make them green areas aimed at walkability and pedestrian well-being; winners will receive a cash prize of up to BRL 100,000

The Municipality of Sao Paulo (SP Urbanismo) launched, in partnership with the global network of mayors C40 Cities, an International Competition to regenerate four public open spaces in downtown of Sao Paulo. Aimed at architects, urban planners and architecture and urban planning firms from Brazil and abroad, the focus of competition is transform underutilized sites into beacons of sustainability and resilience.

The Reinventing Cities is a global competition led by C40 that seeks to accelerate the development of decarbonised and resilient urban regeneration across the globe. São Paulo is the only Latin American representative on the list of cities for this edition of the competition.

C40 Cities is a global network of mayors taking urgent action to confront the climatr crisis and create a future where everyone can thrive. SP Urbanismo is a public company of Municipality of Sao Paulo that seek to support and promote urban development projects.

For the Reinventing Cities competition, the Municipality of SP selected four public open spaces to receive Preliminary Studies: Kinjo Yamato Market / Prestes Maia Boulevard; Alfredo Issa Square; João Mendes Square and Clovis Beviláqua Square. They are located at strategic points in the Historic Center of Sao Paulo.

The design of the footbridge prioritises vehicle traffic, as it increases and hinders pedestrian acess. The focus is the regenerstion of these public spaces with the creation of green areas aimed at walkability and pedestrian well-being.

To participate of the competition, it is necessary to register by September 20. All competition documents including Autocad drawings for each site are on the C40 website.

The announcement of the winners will take place in a public ceremony scheduled for October.

More information:

imprensaspurbanismo@spurbanismo.sp.gov.br

+55 11 3113-7764

Site C40: https://www.c40reinventingcities.org/

Site SP Urbanismo: https://www.prefeitura.sp.gov.br/cidade/secretarias/licenciamento/desenvolvimento_urbano/sp_urbanismo/index.php?p=328335&fbclid=IwAR2Z7fqNEiae0zEp7vh7DJzP7AcKDfvaFYpXvudG-4opaa6kmXb3iG_A7F8

Instagram SP Urbanismo: https://www.instagram.com/sp_urbanismo/?igshid=YmMyMTA2M2Y%3D&fbclid=IwAR3IutzKdfr2IF26J1-BVLT10bahotExuN8KpvhEktY-tJlJmsCh3fgPHlc

Linkedin SP Urbanismo: https://www.linkedin.com/company/sp-urbanismo/?fbclid=IwAR2mIqYEADv6CuTEu0Gd-mDT0NghNS6YUQUCo7omcdCYMuSQuEdl8Fz6Pm8

18/8/2022

Série Brasil Inova

Brazilian Antarctic Program completes 40 years of research and scientific advances

In celebration of the 40th anniversary of the Brazilian Antarctic Program (PROANTAR), the Ministry of Science, Technology and Innovation (MCTI), the National Council for Scientific and Technological Development (CNPq/MCTI) and the Secretariat of the Interministerial Commission for Sea Resources participated in a special session on 27/07 during the 74th Annual Meeting of the Brazilian Society for the Advancement of Science (SBPC), which was held at the University of Brasília (UnB).

The program promotes diverse and high-quality scientific research in the Antarctic region. A fundamental point for the continuity of the development of Brazilian research in the Antarctica was the inauguration of the Comandante Ferraz Antarctic Station (EACF), reopened in 2020 after a fire destroyed part of its facilities. The MCTI is responsible for the laboratory structure at EACF and, in 2022, invested another R$5 million in equipment. In addition, the MCTI supported the installation of the Criosfera I module, which is an advanced PROANTAR laboratory in the interior of the continent.

This month, the MCTI announced actions and investments within the scope of the Science of the Sea and Antarctic Science programs. The contribution from the National Fund for Scientific and Technological Development (FNDCT) for actions related to the Antarctica is of R$ 55.37 million.

Learn more at: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2022/07/programa-antartico-brasileiro-completa-40-anos-de-pesquisas-e-avancos-cientificos?fbclid=IwAR2RfC9n85jKQt0R2YgSLCNu-EnyC_TB7TFMU2T65ZnGcsCroh0PDOJmgrc

24/8/2022

Série Brasil Inova

5G could be the catalyst for a fourth industrial revolution in Brazil

The arrival of 5G in Brazil will impact all production processes, being the catalyst for a fourth industrial revolution, for uniting the physical and digital worlds and providing the emergence of solutions that will optimize work.

These were the main conclusions of the panel "Revolution in Industry and Economy: how 5G should leverage the Brazilian productive sector", at the 5G.BR seminar, in São Paulo, organized on August 11th and promoted by the Ministry of Communications of Brazil (MCom). The event discussed the scope of transformation in the economy and in the productive sectors with the arrival of 5G in Brazil.

Nokia's Head of Enterprise for Latin America, Marcelo Entreconti, classified 5G as important in the industry process and in the monitoring of operations. "5G arrives as an alternative for optimization for the manufacturing sector", he declared. He highlighted the partnerships signed by the company for the development of 5G. "Technological evolution is being built together. We are going to build more infrastructure to support smarter and more structured coverage," he added.

The Finnish Minister of Transport and Communications, Timo Harakka, also attended the 5G.BR - The Transformative Role of New Technology seminar. The panel discussion where he participated had its key focus on 5G and how technology can help to achieve the Sustainable Development Goals.

Learn more at: https://www.gov.br/mcom/pt-br/noticias/2022/agosto/5g-pode-ser-o-catalisador-de-uma-quarta-revolucao-industrial?utm_source=Linkedin&utm_medium=feed&utm_campaign=materia-5g-pode-ser-o-catalisador&utm_content=institucional&fbclid=IwAR1eDBap0gPcO3Btvc9p6FbYiGiEAWEExB8PzRvtvbqYMODwstMcZyyXUtM

12/9/2022

Série Brasil Inova

Brazilian scientists use modified yeast to produce xylitol from sugarcane straw

Sugarcane straw, a low-cost biomass used in the production of ethanol, can form the basis for the production of a sweetener with even greater added value, xylitol. Through the action of a modified version of the microorganism "Saccharomyces cerevisiae", the xylose present in the material can be metabolized, resulting in the healthy and increasingly popular sweetener.

The results of the study carried out at the State University of Campinas (Unicamp) in Brazil were published in the Journal of Genetic Engineering and Biotechnology.

Learn more at: https://agencia.fapesp.br/cientistas-usam-levedura-modificada-para-produzir-o-adocante-xilitol-a-partir-da-palha-da-

cana/39417/?fbclid=IwAR2gGoR_qKukMfcm_EKJDdqyMFvYPQWMDK8n2ISKWqbVazchMuLdPeBVdoQ

22/9/2022

Série Brasil Inova

Cassava starch can be a source of “Clean Hydrogen”

After a green patent application for a process applied to the production of glucose syrup from cassava starch, the doctoral project of the Nigerian biochemist, Daniel Fasheun, developed at the National Institute of Technology of Brazil (INT/MCTI), has as a new result the production of hydrogen from this same raw material.

The most abundant element on the planet, with greater energy capacity and zero CO2 emissions, hydrogen (H2) has been increasingly used as a fuel, which is already its main use. However, 75% of the raw material used to supply this demand is natural gas, in processes that generate large amounts of CO2, contradicting the advantages of using hydrogen as a clean fuel. In this context, the discovery of a new clean process for the production of the so-called “green hydrogen” reaffirms the sustainable perspective of using this source, which has a projected demand of 200 million tons per year by 2030, according to the International Energy Agency (IEA). In addition, cassava starch is an abundant resource both in Brazil and in the country of origin of Daniel Fasheun.

Fasheun has a scholarship from the Brazilian National Council for Scientific and Technological Development (CNPq) and is part of the CNPq-TWAS program that brings young doctors and doctoral students from other developing countries to carry out their research in Brazil.

Learn more at: https://www.gov.br/cnpq/pt-br/assuntos/noticias/pesquisa-do-dia/amido-da-mandioca-pode-ser-fonte-de-201chidrogenio-limpo201d?fbclid=IwAR0pRK7xILelUpmO2fV041cmc23QJp-nn5aAIPYnXqBH4O_URHPLukPGAmg

29/9/2022

Série Brasil Inova

Brisanet will activate 5G network in small Brazilian cities this year

The Brazilian telecommunications company Brisanet aims to implement the 5G network in Northeastern cities with less than 30.000 inhabitants using the 2,5 GHz band for B2C and B2B at the end of this year.

In addition, the company plans to be in the medium-sized cities of the Northeast in January 2023 and in the large ones by the end of the first quarter of next year.

The 3.5 GHz band, also acquired by the operator, will only be used when the price of the 5G smartphone drops. The implementation of the network in the Central-West region will also be left for later.

Learn more at: https://www.telesintese.com.br/brisanet-vai-ativar-rede-5g-ainda-este-ano-em-cidades-pequenas/?fbclid=IwAR0HhzCeOjW5QmkvVLa2bruVAddBblrBpNJ4cnuEn3c7yI_0-wkYZh_JJj0

6/10/2022

Série Brasil Inova

Vaccine against Covid-19 produced by a Brazilian university is authorized for clinical trials; may be the first Brazilian vaccine to be applied

On October 3rd, the Brazilian Health Regulatory Agency (Anvisa) published the authorization of SpiN-TEC, a vaccine that is being developed by the Center of Vaccine Technology of the Federal University of Minas Gerais (UFMG) against Covid, for clinical trials. The clinical trials should start by the end of this month.

Tests have proved that the vaccine is effective against different variants of the virus, showing protection against both severe and moderate Covid cases.

The study will be funded by UFMG, the Ministry of Science, Technology and Innovation, Fiocruz and Belo Horizonte City Hall.

According to the research coordinator, Ricardo Gazzinelli, SpiN-TEC could be the first human vaccine fully developed in Brazil. It is expected to be applied to the population starting next year.

Learn more at: https://g1.globo.com/mg/minas-gerais/noticia/2022/10/03/vacina-contra-a-covid-19-produzida-pela-ufmg-e-autorizada-para-testes-em-humanos-pode-ser-a-primeira-brasileira-a-ser-aplicada.ghtml?fbclid=IwAR2ZPImuwchc_BAGFBGGPVLQ0YkGcudPivwvkEZMOuDHXNXyaP7RNZbNGyw

20/10/2022

Série Brasil Inova

Brazilian healthtech startup has a project recognized by the WHO

A project created by HealthBit, a healthtech founded by former students of the Technical High School of Campinas (COTUCA) and the State University of Campinas (UNICAMP) in Brazil, was recognized by the World Health Organization (WHO).

The “Facilitators – Uniting technology and data science” (Facilitadores – Unindo tecnologia e ciência de dados) project is part of the set of initiatives called “Nursing Now Brasil”, a global campaign that seeks to improve health, raising the profile and status of nursing around the world. The initiative is carried out in collaboration with the WHO and the International Council of Nurses and aims to value and give visibility to innovative and outstanding health initiatives, which are carried out and led by nurses.

Learn more at: https://unicampventures.org.br/2022/10/10/empresa-filha-da-unicamp-healthbit-tem-projeto-reconhecido-pela-organizacao-mundial-de-saude/?fbclid=IwAR0RjTc7Zg-ybuVIgx8algSDEusasSitUv5mSIgIXVge54lyPg7pLavAxmY

27/10/2022

Série Brasil Inova

Method based on artificial intelligence allows for separation of specialty and traditional coffees before roasting

The selection process of specialty coffee beans requires three types of verification – two physical, in samples of raw and roasted coffee, and one sensorial, obtained by tasting the beverage. All these steps are necessary to obtain the Specialty Coffee Association of America (SCAA) certification.

A group formed by scientists from the Center for Nuclear Energy in Agriculture (Cena) and the Luiz de Queiroz College of Agriculture (Esalq), both from the University of São Paulo (USP) in Brazil, and from the Computer Center of the Federal University of Pernambuco (UFPE) in Brazil developed a method for bean selection based on the use of multispectral imaging and machine learning. The process does not require roasting, can be carried out in real time during the production process and avoids possible human errors in the evaluation, even if it does depend on expensive equipment.

The article “Application of multispectral imaging combined with machine learning models to discriminate special and traditional green coffee” describing the new method was published in the journal “Computers and Electronics in Agriculture”.

Learn more at: https://agencia.fapesp.br/metodo-baseado-em-inteligencia-artificial-permite-separar-cafes-especiais-e-tradicionais-antes-da-torra/39854/?fbclid=IwAR1BlK_6mLIUX8dEOKpK-djFHlHFR1c1Nrd2u_GJeJ6OgOgoc6P51UCHOuY