

PRISMA de espaitec

UNA VISIÓN 360°
DE TECNOLOGÍA
E INNOVACIÓN

JUNIO
SEPTIEMBRE
2025

Comunicaciones
resilientes y tecnologías
espaciales

Ciberseguridad
aplicada a emergencias
y entornos críticos

Infraestructuras
inteligentes y resilientes
para emergencias

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Noticias

Cyberattack on Collins Aerospace disrupts flights at Heathrow, other European airports

Fuente: Industrialcyber.co / **Fecha:** 20/09/2025

Ciberseguridad

A cyberattack targeting Collins Aerospace, a provider of check-in and boarding systems for global airlines, disrupted operations at several major European airports on Saturday, including London's Heathrow, the continent's busiest. The cybersecurity incident caused widespread flight delays and cancellations. Heathrow warned passengers of potential disruptions, citing a 'technical issue' in Collins' software that affected electronic check-in and baggage handling systems. "The impact is limited to electronic customer ch...(+)

[Ver más...](#)



Satellite Revolution: AD Ports Group's LEO Connectivity Transforms Global Shipping

Fuente: Ts2.tech / **Fecha:** 19/09/2025

Comunicaciones

AD Ports Group – the Middle East's logistics and port powerhouse – is literally reaching for the stars in its latest digital transformation effort. In September 2025, the company began a phased rollout of Low Earth Orbit (LEO) satellite connectivity across all its operations [8]. This bold initiative equips AD Ports Group's entire fleet of ships and its vast network of seaports with high-speed internet beamed from constellations of satellites orbiting only a few hundred kilometers above the Earth. The goal is simple but game-changing: to c...(+)

[Ver más...](#)



Smart buildings are fastest growing market for LoRaWAN deployments

Fuente: lotinsider.com / Fecha: 17/09/2025

Infraestructuras

The LoRa Alliance recently announced that smart buildings have emerged as the fastest-growing vertical market for LoRaWAN deployments, based on information provided by members. Key applications driving a rapid return on investment (ROI) for building owners include energy and operational efficiency, environmental monitoring, and preventive maintenance. Legislation, such as France's BACS decree, imposes a gradual reduction in energy consumption, is also accelerating activity in this sector. "The smart building ma...(+) "

Ver más...



Critical infrastructure protection and the role of telecommunications in major national and international events

Fuente: Telefonica.com / Fecha: 16/09/2025

Comunicaciones

Telecommunications are much more than an essential service: they constitute critical infrastructure and a central pillar for a country's national security and institutional governance. This importance is accentuated in specific contexts, such as the hosting of large-scale international events, which have marked Telefónica Brazil's institutional agenda in recent years. In the case of Brazil, the recent G20 Summit in Rio de Janeiro (2024), the B20 in São Paulo (2024)...(+)

Ver más...



ETSI Elects Three Prominent Leaders to Drive the Creation of New Standards under the EU Cyber Resilience Act

Fuente: Etsi.org / Fecha: 16/09/2025

Comunicaciones

ETSI is pleased to announce it has elected three new officials to lead EUSR Working Group within TC CYBER, a standardisation working group to support the EU Cyber Resilience Act. In response to a request from the European Commission in early June of this year, ETSI is facilitating the harmonisation of cybersecurity standards for digital products across the EU. Its three new appointments, Sandra Feliciano (Chair), Dr George Sharkov (Vice-Chair), and Simon Phi...(+) "

Ver más...



Commission collects feedback to simplify rules on data, cybersecurity and artificial intelligence in the upcoming Digital Omnibus

Fuente: Europa.eu / Fecha: 16/09/2025

Ciberseguridad

The European Commission has opened a call for evidence to collect research and best practices on how to simplify its legislation in the upcoming Digital Omnibus, especially when it comes to data, cybersecurity and artificial intelligence (AI). This is fully in line with the Commission's simplification agenda and efforts to create a more favourable business environment, by lightening administrative burdens and costs on companies. The initiative also supports ...(+)

Ver más...



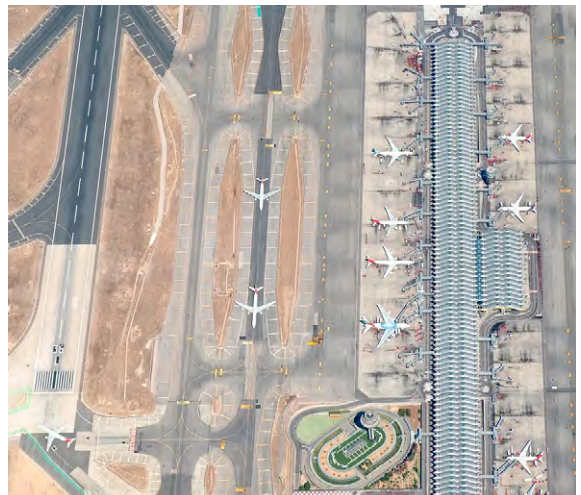
Más de 120.000 vuelos sufrieron interferencias rusas a GPS en los primeros cuatro meses de 2025

Fuente: Lisanews.org / Fecha: 08/09/2025

Ciberseguridad

El Báltico registra miles de incidentes aéreos por alteraciones de señal satelital y la OACI exige a Moscú el cese inmediato de las perturbaciones en la navegación aérea. Casi 123.000 vuelos se vieron afectados entre enero y abril de 2025 por señales rusas que alteraron el GPS y otros sistemas de navegación, según un informe elaborado por Suecia y cinco países vecinos al que accedió la televisión sueca SVT. La Agencia Sueca de Transporte confirmó un incremento de alertas en los últimos meses, como la detectada en el avión en el ...(+)

Ver más...



AI-Enabled Predictive Analytics: From Reliability to True Grid Resilience

Fuente: liot-world.com / Fecha: 29/08/2025

Infraestructuras

Extreme weather events, rising renewable penetration, and cyber risks are exposing a critical weakness in global power systems: our grids were designed for reliability, not resilience. While reliability is about minimizing day-to-day interruptions, resilience is about recovering quickly from major disruptions – whether a hurricane, wildfire, or coordinated cyberattack. In a recent IIoT World panel, experts emphasized that AI-enabled predictive analytics is emerging as the bridge between the two. By combining data from sensors, di...(+)

Ver más...



The Building Resilience Index and Other Tools Finally Pay Off for APAC Real Estate

Fuente: Urbanland.uli.org / **Fecha:** 28/08/2025

Infraestructuras

In September 2023, Hong Kong was hit by its heaviest rainfall on record—nearly 6.3 inches (160 mm) in a single hour. Link Asset Management's Temple Mall North, like many other buildings, suffered severe flood damage. In response, the company invested in detachable flood barriers and Internet-of-Things (IoT) sensors to mitigate future risk. For Link's bottom line, this resilience investment translated into an 11.7 percent reduction in insurance premiums. Meanwhile, in Manila, NEO's buildings weathered yet ano...(+)

Ver más...



ENISA to operate the EU Cybersecurity Reserve

Fuente: Europa.eu / **Fecha:** 26/08/2025

Ciberseguridad

The European Commission has signed an agreement with ENISA, the European Union Agency for Cybersecurity for the operation and administration of the EU Cybersecurity Reserve. Abstract visual with text "EU Cybersecurity Reserve officially launched, ENISA signs agreement to manage and operate the Reserve" The Commission will contribute €36 million from the Digital Europe Programme (DEP) to the functioning of this new initiative under the Cyber Solidarity Act to boost the cyber resilience of the EU and its Member States and - under certain conditions - third countries associated to DEP. ...(+)

Ver más...



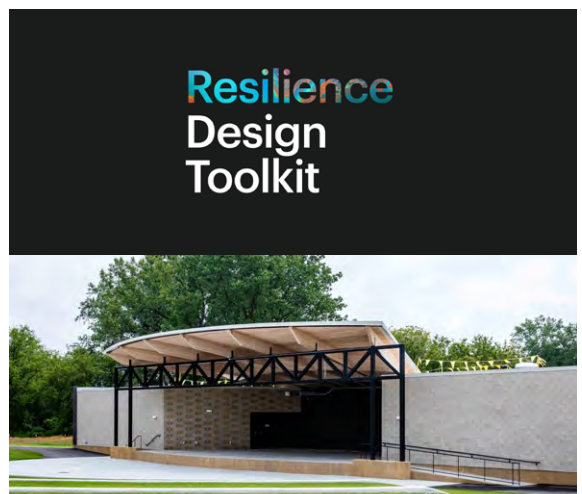
From framework to practice: Applying the Resilience Design Toolkit in real-world architecture

Fuente: Aia.org / **Fecha:** 20/06/2025

Infraestructuras

AIA partner Concrete Masonry Checkoff explains how well-engineered CMU systems can support four core resilience capacities simultaneously. The built environment is under immense pressure, from climate volatility and resource constraints to changing codes and client expectations. Architects are expected to balance performance, aesthetics, and accountability with every design decision they face. The AIA Resilience Design Toolkit equips architects with a structured approach to managing these challenges. To move f...(+)

Ver más...



Vulnerabilidad zero day en Primion-Digitek EVA-LOS Secure 8

Fuente: Titaniumaics.blogspot.com / **Fecha:** 15/06/2025

Ciberseguridad

Durante un ejercicio de hacking ético industrial a uno de nuestros clientes, detectamos una vulnerabilidad zero day crítica en una aplicación de control de accesos y personal de planta. En este caso se trata de la aplicación Evalos8 (Primion-Digitek), en concreto en la versión v1.0.1.55 del módulo Secure8. No hemos podido acceder a otras versiones anteriores de este producto para verificar si se reproduce la vulnerabilidad, por lo que estas podrían verse igualmente afectadas. Primion-Digitek se especializa en implantación...(+)

Ver más...



La UJI participa en un proyecto europeo para transformar las telecomunicaciones en sistemas de "sensing"

Fuente: Castellonplaza.com / **Fecha:** 21/05/2025

Comunicaciones

El proyecto europeo ECSTATIC "Ingeniería de arquitecturas combinadas de sensores y telecomunicaciones para la caracterización tectónica y de infraestructuras" en el que participa la Universitat Jaume I de Castellón, estudia la transformación de las redes de telecomunicaciones en sistemas globales de sensing con aplicaciones en monitorización ambiental, incluyendo el seguimiento de terremotos y tsunamis, la supervisión de infraestructuras y la detec...(+)

Ver más...



El Gobierno aprueba un refuerzo de las capacidades de España en ciberseguridad y ciberdefensa con 1.157 millones de euros

Fuente: Digital.gob.es / **Fecha:** 06/05/2025

Ciberseguridad

Estas medidas complementan las actuaciones incluidas en el Plan Nacional de Ciberseguridad, aprobado en 2022, y se enmarcan, asimismo, en el Plan Industrial y Tecnológico para la Seguridad y la Defensa, anunciado por el presidente del Gobierno el pasado 24 de abril. La extensión de las infraestructuras digitales, la evolución del contexto geopolítico, los retos que presentan tecnologías disruptivas como la inteligencia artificial o la computación cuántica, ha...(+)

Ver más...



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Empresas y mercados

Future-proof infrastructure – Rejlers to lead power grid works for Vantaa's new light rail

Fuente: Rejlers.com / **Fecha:** 19/09/2025

Comunicaciones

Vantaan Energia Sähköverkot Oy has selected Rejlers as its construction management partner for a multi-year project linked to the new light rail system in Vantaa, Finland. The project involves significant renewal and relocation of the power grid along the planned tram route. Rejlers is responsible for construction management, safety coordination and site supervision for both civil and grid construction works. The project's complexity lies in its dense urban setting and the close collaboration required with multiple stakeholders...(+)

[Ver más...](#)



From Risk to Resilience: Building a Culture of Preparedness in Public Sector and Critical Infrastructure

Fuente: Claroty.com / **Fecha:** 19/09/2025

Ciberseguridad

As discussed in the previous week's post, preparedness is not an abstract exercise. It's the disciplined, proactive process of anticipating risks to resilience and operations, assigning timely ownership, and empowering people across the organization to act decisively and confidently when risks surface. The week two blog calls out the need to synthesize risk signals so that preparedness programs are well-informed. This is crucial because without a broad understanding...

[Ver más...](#)



Norfolk Southern Shows How AI-Powered Vision Systems Are Revolutionizing Industrial Inspection

Fuente: Automationworld.com / Fecha: 18/09/2025

Infraestructuras

Though AI hype dominates headlines, a collaboration between Norfolk Southern and Georgia Tech reveals how AI-powered inspection systems are identifying critical flaws that human inspectors and traditional methods would likely miss while demonstrating why this technology is becoming essential for manufacturers seeking zero-defect production and operational safety. Norfolk Southern's AI-powered Digital Train Inspection portals detected more than 25,000 mechanical defects in 2024, including 87 severe issues requiring immed...(+)

Ver más...



Fueling the Future of Supply Chain AI – Together with Avery Dennison

Fuente: Wiliot.com / Fecha: 16/09/2025

Comunicaciones

We are in the midst of a global rearchitecture of how supply chains operate – a transformation driven by the convergence of real-time data, ambient sensing, and AI. As this shift accelerates, demand for Wiliot's ambient IoT technology continues to rise. Many of the world's most influential companies – across retail, logistics, postal, and food – are moving quickly from exploration to scaled deployment, embedding ambient IoT into the core of their operations to generate real-time intelligence. These companies understand a ...(+)

Ver más...



Shandong Inspur Intelligent Building Technology Showcases AI-Driven Solutions at BEX Asia 2025

Fuente: Prnewswire.com / Fecha: 11/09/2025

Infraestructuras

Shandong Inspur Intelligent Building Technology Co., Ltd. ("Inspur Intelligent Building"), a leading provider of smart building solutions, took center stage at BEX Asia 2025, unveiling its latest advancements in AI-powered smart building systems. Organized by leading global event management company Reed Exhibitions, the exhibition opened on September 3, 2025, at the Marina Bay Sands Expo & Convention Centre in Singapore. As one of the largest specialized building and construction exhibitions in Southeast Asia, this ye...(+)

Ver más...



Securing Australia's Critical Infrastructure: How IEC 62443 Strengthens SOCI Act Compliance

Fuente: Nozominetnetworks.com / Fecha: 02/09/2025

Ciberseguridad

Australia is taking bold steps to safeguard the essential systems that keep the country running—from electricity and water to transport, healthcare and communications. With the Security of Critical Infrastructure (SOCI) Act and official adoption of the IEC 62443 series as national standards (designated as IEC 62443) for operational technology (OT) environments, the Australian government has set clear expectations for how organizations must protect their most vital assets. Now that the legislative requirements have been set, orgar...(+)

Ver más...



Belden expands connectivity, cybersecurity portfolio with fiber, ethernet, OT security solutions for critical infrastructure

Fuente: Industrialcyber.co / Fecha: 01/09/2025

Comunicaciones

Belden has launched a new lineup of next-generation connectivity and cybersecurity products designed for critical applications. The releases include gel-free fiber cables, extended Ethernet reach solutions, and advanced OT (operational technology) network protection, aimed at supporting evolving automation needs and the growing demands of smart infrastructure. Belden's Gel-Free Loose Tube Optical Fiber Cables feature a compact, resilient design ...(+)

Ver más...



T-Mobile just expanded satellites and drones for emergencies — here's the fine print

Fuente: Phonearena.com / Fecha: 27/08/2025

Comunicaciones

Your phone won't develop magical capabilities suddenly, but it's slowly getting there. September is around the corner and with it – the National Preparedness Month. That's why T-Mobile is on the topic, explaining how the company is expanding its technology and resources to strengthen connectivity during natural disasters and severe weather events. The company has broadened its satellite services, increased the number of deployable assets, upgraded community support vehicles and reinforced its physical netw...(+)

Ver más...



Narval Partnership Advances AI-Powered Cargo Security in Panama

Fuente: Dscinstitute.org / **Fecha:** 18/08/2025

Comunicaciones

The Digital Supply Chain Institute (DSCI) congratulates Narval Holding Corp. on its innovative partnership with BigBear.ai to launch an AI-powered cargo security management solution in Panama. This collaboration addresses one of the most pressing challenges in global trade: ensuring security and transparency across complex, interconnected supply chains. Panama's position as a global trade hub makes it a natural testbed for next-generation solutions. What sets this initiative apart is the combination of AI-driven insights with r...(+)

Ver más...



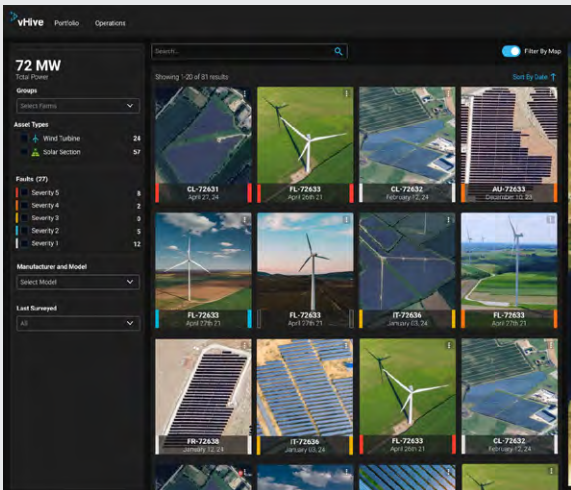
The Advantages of Using a Unified Digitization Platform for Wind and Solar Farms

Fuente: Vhive.ai / **Fecha:** 05/08/2025

Comunicaciones

The renewable energy industry is growing fast as companies invest more in wind and solar power. With global efforts pushing for cleaner energy, businesses that run wind and solar farms need better ways to manage and maintain their expanding portfolios. Traditional inspections often fall behind, leading to delays, downtime, and higher costs. Many companies now use drones and AI to work faster and more efficiently. This technology offers an innovative way to inspect, helping operations and maintenance (O&M) teams max...(+)

Ver más...



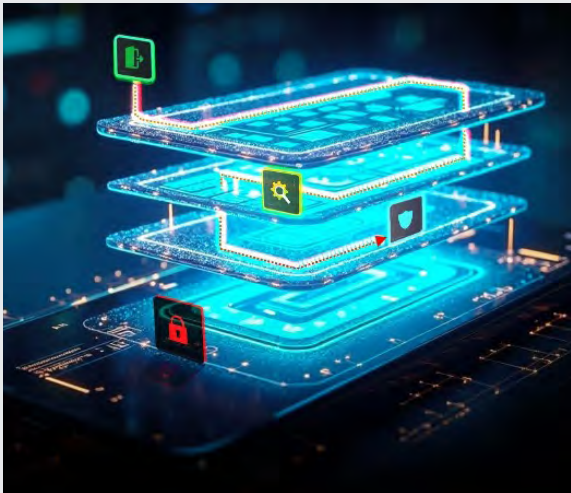
RTX to optimize cyber vulnerability detection for DARPA

Fuente: Rtx.com / **Fecha:** 05/08/2025

Ciberseguridad

RTX's (NYSE: RTX) BBN Technologies was awarded a contract from DARPA to support its Intelligent Generation of Tools for Security, or INGOTS, program. INGOTS aims to strengthen cybersecurity by developing advanced methods to identify and mitigate complex exploit chains, preventing their use in real-world attacks. Exploit chains pose a growing threat, amplified by the increasing complexity and sophistication of cyberattacks. The U.S. Cybersecurity and Infrastructure Security Agency's Known Exploited Vulnerabilities cat...(+)

Ver más...



Aptiv drives faster remediation and enhances security with Tanium

Fuente: Explore.tanium.com / Fecha: 30/07/2025

Ciberseguridad

The maker of automotive 'brains and nervous systems' needed an approach to endpoint security that was flatout fast. With help from Tanium, Aptiv now moves from endpoint vulnerability to remediation with a speed even a Ferrari might envy. A fast-moving industry demands fast-moving security. In the fast-moving auto industry, it pays to be speedy. That's been the case for Aptiv PLC, a company focused what its CEO recently described as "the brain and nervous system on the vehicles." Since 2017, when Aptiv emerged from...(+)

Ver más...



Cómo reducir riesgos y optimizar recursos en subestaciones eléctricas con vigilancia e inspección autónoma

Fuente: Star-robotics.com / Fecha: 26/06/2025

Infraestructuras

La gestión de subestaciones eléctricas plantea importantes retos operativos, especialmente en un contexto donde la estabilidad energética y la seguridad industrial son factores críticos. Las inspecciones manuales y los sistemas tradicionales de vigilancia ya no ofrecen la eficacia que requieren unas infraestructuras cada vez más complejas y, en muchos casos, desatendidas. Riesgos crecientes en instalaciones desatendidas. Muchas subestaciones ...(+)

Ver más...



Arkadia Space pone en órbita su sistema de propulsión verde y marca un hito en Europa

Fuente: Castellonaldia.elmundo.es / Fecha: 09/06/2025

Infraestructuras

Arkadia Space, ubicada en el aeropuerto de Castellón, ha alcanzado un hito en el sector espacial europeo con el exitoso funcionamiento de su sistema de propulsión sostenible, DARK. Lanzado el 15 de marzo durante la misión Transporter-13 de SpaceX, este motor ecológico valida la tecnología innovadora de la empresa española. La empresa española Arkadia Space, ubicada en el aeropuerto de Castellón, ha logrado un importante avance en el sector espacial europeo con el exitoso funcionamiento en órbita de su sistema ...(+)

Ver más...



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Patentes

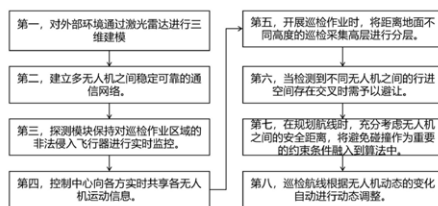


图1

Dynamic planning method and system for photovoltaic multi-unmanned aerial vehicle cooperative inspection route

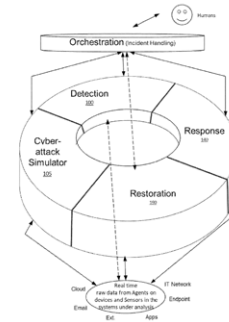
Publicación: Espacenet / **Fecha:** 27/06/2025

Comunicaciones

Solicitante: HUNAN CLEANING ENERGY BRANCH OF HUANENG POWER INTL INC

The invention discloses a dynamic planning method and system for a photovoltaic multi-unmanned aerial vehicle cooperative inspection route, and belo...(+)

[Ver más...](#)



Improved And Augmented Artificial Intelligence-Based Investigations Of Potential Cyber Incidents, And Use Thereof

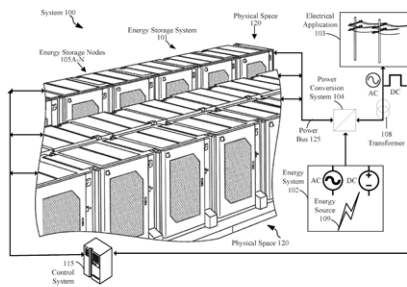
Publicación: Espacenet / **Fecha:** 28/08/2025

Ciberseguridad

Solicitante: DARKTRACE HOLDINGS LTD [GB]

A computer-implemented method of investigating a potential cyber incident detected by a cyber security system is described. The method comprises using artificial intelligence (AI) based analysis to perform ar...(+)

[Ver más...](#)



System And Method For Intelligent Protection Cyber Shield Module Of A Battery Energy Storage System For Attack Detection And Containment

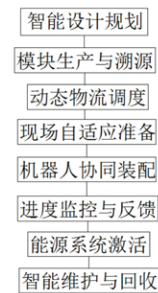
Publicación: Espacenet / **Fecha:** 17/07/2025

Ciberseguridad

Solicitante: FLUENCE ENERGY LLC [US]

A system includes an energy storage system including at least one power conversion system coupled to a plurality of energy storage nodes, at least one control system coupled to the plurality of en...(+)

[Ver más...](#)



Building construction method based on MIC

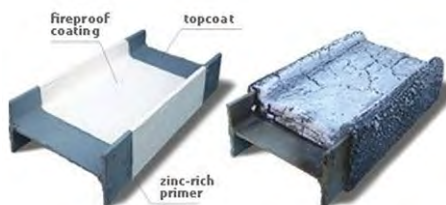
Publicación: Espacenet / **Fecha:** 04/07/2025

Infraestructuras

Solicitante: THE FIFTH ENG CO LTD OF CHINA RAILWAY SEVENTH GROUP

The invention relates to the technical field of building construction, in particular to an MIC-based building construction method, which comprises the following steps: S1: based on a building information model; s2, embedding a self-repairing material layer and a ...(+)

[Ver más...](#)



Self-repairing type steel structure fireproof coating and preparation method thereof

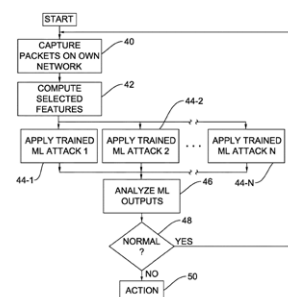
Publicación: Espacenet / **Fecha:** 04/07/2025

Infraestructuras

Solicitante: AUTSON TECH GROUP CO LTD

The invention discloses a self-repairing type steel structure fireproof coating and a preparation method thereof, and belongs to the technical field of fireproof coatings, the self-repairing type steel structure fireproof coating comprises the following raw mater...(+)

[Ver más...](#)



Linearized real-time network intrusion detection System

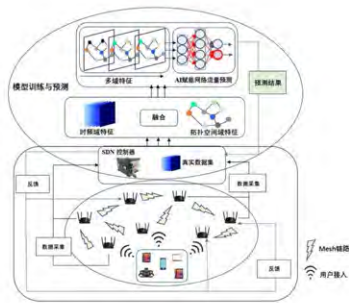
Publicación: Espacenet / **Fecha:** 01/07/2025

Ciberseguridad

Solicitante: US NAVY [US]

A method for detecting a cyberattack on a network being monitored includes providing a labeled packet capture data training set. Metrics are identified that are indicative of either cyberattack data or normal data. Statistical measures are computed based on the identified metrics. A determination is made if lineariza...(+)

[Ver más...](#)



Wireless Mesh network flow prediction method based on multi-domain feature fusion deep learning

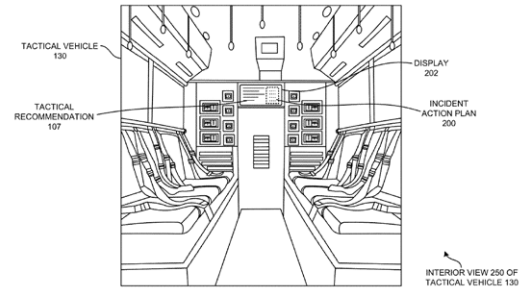
Publicación: Espacenet / **Fecha:** 27/06/2025

Comunicaciones

Solicitante: UNIV NANJING POSTS & TELECOMMUNICATIONS

The invention discloses a wireless Mesh network flow prediction method based on multi-domain feature fusion deep learning, and belongs to the technical field of communication networks. The met...(+)

[Ver más...](#)



Adaptive Mission Strategy Optimization Through Ai-Generated Ambient Recommendations For Tactical Command

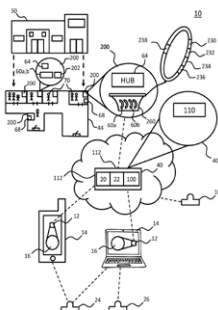
Publicación: Espacenet / **Fecha:** 26/06/2025

Comunicaciones

Solicitante: GOVERNMENTGPT INC [US]

Disclosed are a method, system, and apparatus of adaptive mission strategy optimization through ai-generated ambient recommendations for tactical command. According to one embodiment, the method includes simultaneously listening to multiple com...(+)

[Ver más...](#)



Emergency Real-Time Location And Physical Monitoring System And Method

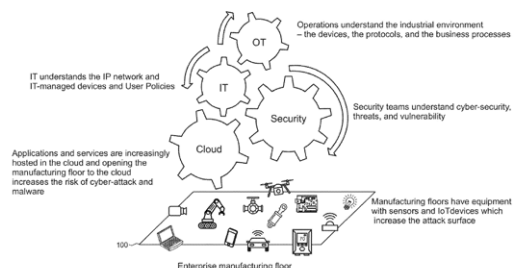
Publicación: Espacenet / **Fecha:** 26/06/2025

Comunicaciones

Solicitante: KETCHUM RUSSELL [US]

A system and method for real-time location and physical monitoring in an emergency. Included are: a computing application providing a GUI, the GUI providing at least: a location mapping of the emergency; and a location and health status of persons wi...(+)

[Ver más...](#)



Endpoint Security Groups In Private Multi-Access Edge Compute Networks

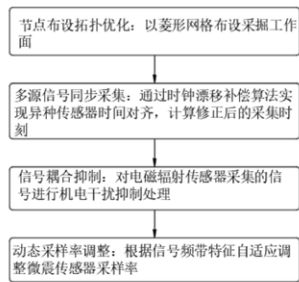
Publicación: Espacenet / **Fecha:** 26/06/2025

Ciberseguridad

Solicitante: MICROSOFT TECHNOLOGY LICENSING LLC [US]

Endpoint security groups include computing device endpoints that are classified according to commonly shared device features and capabilities including device type, function, role, or location. Endpoint security groups are used as an alternative identity mechar...(+)

[Ver más...](#)



Coal mine underground and roadway three-dimensional earthquake dynamic monitoring system based on AI

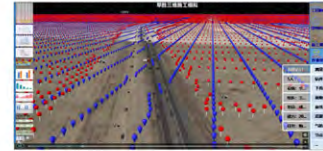
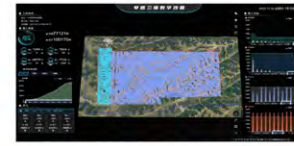
Publicación: Espacenet / **Fecha:** 24/06/2025

Infraestructuras

Solicitante: RES INSTITUTE OF COAL GEOPHYSICAL EXPLORATION OF CHINA NATIONAL ADMINISTRATION OF COAL GEOLOGY

The invention relates to the technical field of dynamic monitoring, in particular to an AI-based coal mine underground and roadway three-dimensi...(+)

[Ver más...](#)



Digital twin platform building method based on seismic acquisition construction

Publicación: Espacenet / **Fecha:** 24/06/2025

Infraestructuras

Solicitante: SINOPEC OILFIELD SERVICE CORP; SINOPEC PETROLEUM ENGINEERING GEOPHYSICS CO LTD; TECH RESEARCH AND DEVELOPMENT CENTER OF SINOPEC PETROLEUM ENGINEERING GEOPHYSICS CO LTD

The invention discloses a digital twinborn platform building method based on earthquake acquisition construction, which comprises the following steps: fir...(+)

[Ver más...](#)



Method and system for improving crack prediction precision by using OVT seismic data

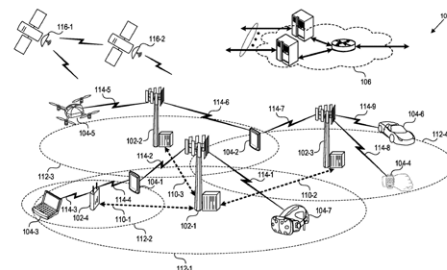
Publicación: Espacenet / **Fecha:** 20/06/2025

Infraestructuras

Solicitante: PETROCHINA CO LTD

The invention discloses a method and system for improving fracture prediction precision by using OVT seismic data, and the method comprises the steps: obtaining original wide azimuth vector offset OVT data, and carrying out the preprocessing; perform...(+)

[Ver más...](#)



Cybersecurity system for services of interworking wireless telecommunications networks

Publicación: Espacenet / **Fecha:** 20/06/2025

Ciberseguridad

Solicitante: T MOBILE USA INC [US]

A system obtains security data of interconnected networks. The visibility of the security data is asymmetric for each interconnected network relative to the other. The security data is continuously stored and used in real-time or near real-time to identify services of th...(+)

[Ver más...](#)

Table 1: Seismic Risk Mapping			
Zone	Description	Recommended Use	Risk Mitigation Measures
High Risk	Areas with high seismic activity and high population density	Essential services, open spaces, non-critical infrastructure	Seismic hazard assessment, seismic hazard mapping, seismic hazard monitoring systems
Moderate Risk	Areas with moderate seismic activity and moderate population density	Residential and commercial buildings with adaptive design	Seismic hazard assessment, seismic hazard mapping, seismic hazard monitoring systems
Low Risk	Areas with low seismic activity and low population density	Critical infrastructure like hospitals, emergency facilities, and key transport hubs	Use standard construction methods with light reinforcements for earthquake resistance

Table 2: Adaptive Structural Systems		
Component	Application	Key advantages
Base Isolation	Absorbing and decreasing seismic forces transmitted to the structure	High-rise buildings, bridges, and critical infrastructure
Tuned Mass Dampers	Reduces vibrations by counteracting building movements during earthquakes	Skyscrapers, towers, and high density urban structures
Lightweight Hybrid Materials	Balance tensile and compressive forces while maintaining building weight	Residential, commercial buildings, modular constructions

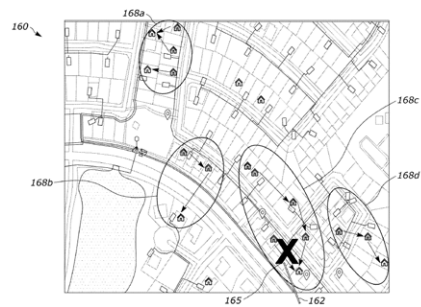
An Integrated Urban Planning And Building Design System For Seismic Risk Mitigation And Environmental

Publicación: Espacenet / Fecha: 19/06/2025

Infraestructuras

Solicitante: ANOROUIAN MOHAMMAD MEHDI [IR]
This invention provides an urban planning and building design system based on seismic resilience, environmental sustainability, and urban expansion problems. Using real-time seismic risk assessment, adaptive structural design, and environmen...(+)

Ver más...



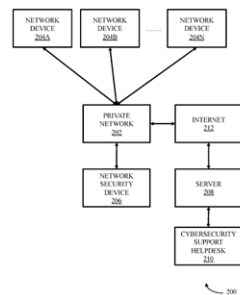
Devices and methods for mesh-based fault detection in passive optical networks

Publicación: Espacenet / Fecha: 17/06/2025

Comunicaciones

Solicitante: FRONTIER COMMUNICATIONS HOLDINGS LLC [US]
A PON system includes both a PON via which optical services are delivered and a wireless network overlaying the PON. The wireless network may be a self-organizing wireless mesh network, and may generally ...(+)

Ver más...



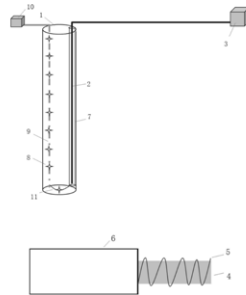
Network Security Device And Method For Detecting Cybersecurity Threats And Risks Across Network Devices In A Network

Publicación: Espacenet / Fecha: 12/06/2025

Ciberseguridad

Solicitante: CYBERROCK LTD [GB]
The present disclosure provides a network security device and method for detecting cybersecurity threats and risks across a plurality of network devices in a private network using a server. The netw...(+)

Ver más...



Earthquake detection system and method and application of earthquake detection system and method in earthquake surface survey

Publicación: Espacenet / Fecha: 10/06/2025

Infraestructuras

Solicitante: CHINA PETROLEUM & CHEM CORP; SINOPEC GEOPHYSICAL RES INSTITUTE CO LTD
The invention provides an earthquake detection system and method and application of the earthquake detection system and method in earthquake surface sur...(+)

Ver más...

JUNIO
SEPTIEMBRE
2025

Informes sectoriales

Synchronous openEO by Sentinel Hub: Quick interactive visualizations and prototyping through openEO

Fuente: Dataspace.copernicus.eu / **Fecha:** 18/09/2025

Comunicaciones

Within CDSE, we are continually working to enhance the user experience and make Earth Observation (EO) data analysis more accessible and efficient for everyone. As we previously highlighted in our blog post "Extending the reach of openEO - interactive processing and path forward, one important aspect of effective EO data workflows is the ability to execute and visualize processes instantaneously. This is particularly im...(+)

Descargar



ETSI Open Source MANO Announces Release EIGHTEEN, Continuing to Advance Declarative Infrastructure and Application Management

Fuente: Etsi.org / **Fecha:** 16/09/2025

Comunicaciones

This webinar will present the brand-new OSM Release EIGHTEEN, which consolidates OSM as a generalized cloud-native orchestrator for infrastructure, platforms, and services. The webinar will demonstrate the new capabilities in declarative infra and app management, including enhanced cluster management and a powerful new declarative modelling for applications.

Descargar



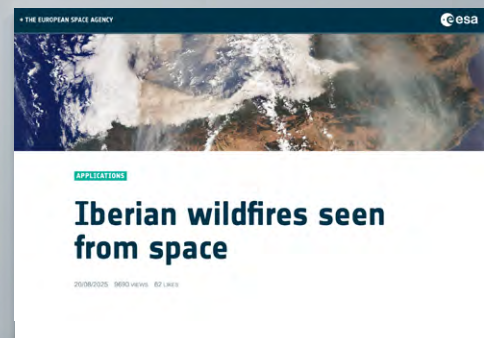
Iberian wildfires seen from space

Fuente: Esa.int / **Fecha:** 20/08/2025

Comunicaciones

Southern Europe is once again in the grip of extreme summer heat. Soaring temperatures and bone-dry land have fuelled widespread wildfires, with the Iberian Peninsula among the regions hardest hit. Flames continue to sweep across parched landscapes, as these images show. From orbit, Earth-observing satellites offer a unique way of tracking the spread of fires and supporting emergency crews battling the blazes on the ground. The images featured here reveal the scale of the crisis, with dense smoke plumes from several fires stretching ac...(+)

Descargar



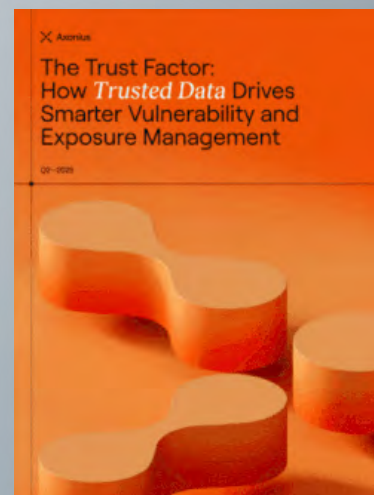
The Trust Factor: How Trusted Data Drives Smarter Vulnerability and Exposure Management

Fuente: Axonius.com / **Fecha:** 01/06/2025

Ciberseguridad

Security teams are ready to act, but unreliable data is slowing them down. While 90% of security and IT leaders say they're ready to act when a threat appears, only 25% trust the data behind their decisions. That trust gap is slowing down remediation, misguiding prioritization, and undermining even the most sophisticated cybersecurity strategies. Based on a survey of 500 security and IT leaders, this report exposes the dis...(+)

Descargar



2025 Darktrace State of ai cybersecurity report

Fuente: Darktrace.com / **Fecha:** 2025

Ciberseguridad

78% of CISOs now admit AI-powered cyber-threats are having a significant impact on their organization. But how well do professionals understand different AI technologies, and what are leaders prioritizing in 2025? In the second edition of our annual landmark AI cybersecurity survey, Darktrace asked 1,500 cybersecurity professionals about their attitudes towards AI, testing their perception of the threat, their comprehension, and their game plan.

Descargar



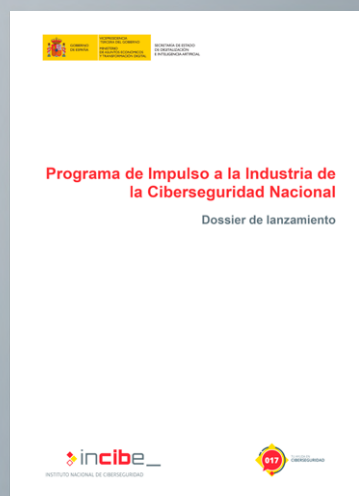
INCIBE Programa de Impulso a la Industria de la Ciberseguridad Nacional

Fuente: Incibe.es / Fecha: 2025

Infraestructuras

LAS POLÍTICAS PÚBLICAS DE IMPULSO DE LA CIBERSEGURIDAD: UE Y ESPAÑA. La importancia que adquiere en la actualidad el diseño de políticas públicas para impulsar la ciberseguridad es creciente. Un fenómeno que está alineado con la prioridad estratégica de la Unión Europea en digitalizar la economía, pues ello comportará una mayor autonomía estratégica de su industria y sectores críticos. Ya en comunica...(+)

Descargar



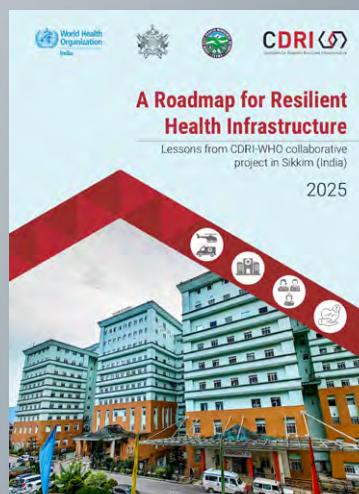
2025 CDRI A Roadmap for Resilient Health Infrastructure

Fuente: Cdri.world / Fecha: 2025

Infraestructuras

Lessons from CDRI-WHO collaborative project in Sikkim (India). This summary document captures CDRI-WHO project in Sikkim, which aimed to strengthen health infrastructure resilience against disasters and climate risks. Sikkim, prone to earthquakes, floods, and GLOFs, faced vulnerabilities across 178 health facilities. The project developed a comprehensive Resilient Health Infrastructure (RHI) Framework covering hospital operations, building safety, critical services, community ...(+)

Descargar



Critical Infrastructure Manufacturing Feasibility Act

Fuente: Congress.gov / Fecha: 2025

Infraestructuras

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 1721) to direct the Secretary of Commerce to conduct a study on the feasibility of manufacturing in the United States products for critical infrastructure sectors, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass. H.R. 1721, the Critical Infrastructure Manufacturing Feasibility Act, was introduced by Representative Miller-Meek ...(+)

Descargar



JUNIO
SEPTIEMBRE
2025

Publicaciones científicas

From isolation to integration: A methodological review of adaptive reuse in industrial heritage buildings

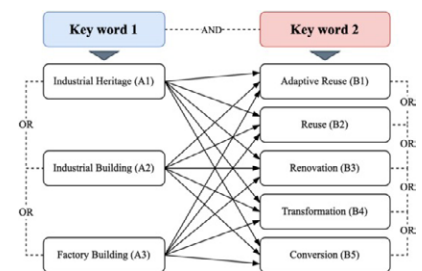
Fuente: Sciencedirect.com

Fecha: 19/09/2025

Infraestructuras



With the advancement of urban transformation and sustainable development, the Adaptive Reuse of Industrial Heritage Buildings (ARIHB) has become a global focus in research and practice. However, existing methodological systems remain fragmented and lack systematic evaluation. Following the PICOS and PRISMA procedures, this study screened 57 core English-language articles from 1,055 retrieved records and classified the methodologies into five categories: Decision-Making Tools, Design and Planning Methods, Analytical Methods, Case Study Methods, and Evaluation Methods. The find...(+)



Ver más...



Unified 0.25-degree gridded infrastructure-critical extreme weather for the United States from 1979 to 2100

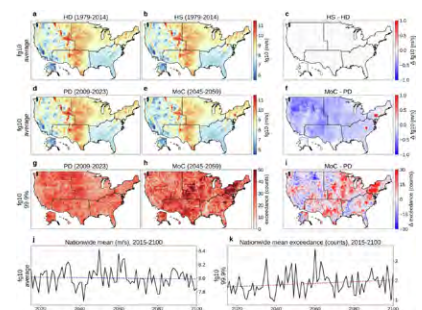
Fuente: Nature.com

Fecha: 17/09/2025

Infraestructuras



Extreme weather events can severely disrupt critical infrastructure, triggering cascading effects on power, transportation, and essential services. However, standard weather and climate datasets often lack specialized variables necessary for hazard assessments. We present a unified dataset of infrastructure-critical weather and climate variables across the United States at 0.25° resolution, covering daily or sub-daily intervals from 1979 to 2100. The dataset includes temperature, dew point, wind gusts, precipitation partitioned by rain, snow, and freezing rain or ice pellets, lightning, and wildfire metrics. Histo...(+)



Ver más...



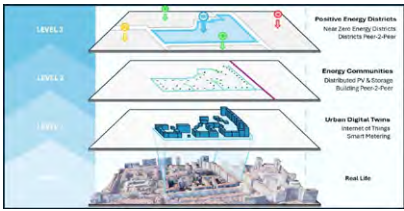
Future Perspectives for Physics-Based Urban Building Energy Modelling Tools

Fuente: Mdpi.com

Fecha: 14/09/2025

Infraestructuras

With the high concentration of people in urban areas and their significant contribution to greenhouse gas emissions, along with the unmet needs of rural settlements, it is crucial to place greater emphasis on designing more energy-efficient cities through the use of renewable energy sources. The present study reviews the advantages of using urban building energy models (UBEMs) to simulate and design urban energy systems, providing valuable insights to researchers and decision-makers working towards an energy transition to more efficient and cleaner forms of energy. This review presents the cu ...(+)



Ver más...



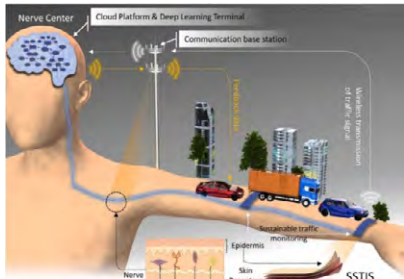
Advances in smart technologies and materials for automated asphalt pavement inspection: Toward transport infrastructure digitalisation

Fuente: Sciencedirect.com

Fecha: 10/09/2025

Infraestructuras

The digitalisation of transport infrastructure helps extend pavement service life by enabling timely maintenance based on real-time data from automated inspection. This paper aims to review recent advancements in smart technologies and materials for the structural health monitoring (SHM) of asphalt pavements. Smart monitoring technologies are discussed by analysing their capability in the real-time automated inspection of early-stage pavement internal distress. Furthermore, smart pavement materials, particularly self-sensing asphalt materials, are reviewed in terms of their functionalities, fabrication and ...(+)



Ver más...



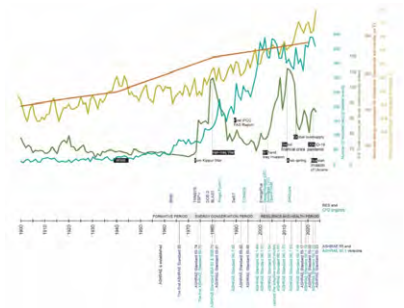
Towards high-performance buildings for thermal resilience and health

Fuente: Sciencedirect.com

Fecha: 09/09/2025

Infraestructuras

Climate disasters and the increasing frequency of extreme weather events significantly challenge the ability of buildings to maintain safe and comfortable indoor environments. High-performance buildings (HPBs) are primarily promoted for their energy efficiency, focusing on minimizing energy consumption and reducing carbon emissions. However, this narrow focus can overshadow the need for thermal resilience and environmental health, leaving building occupants vulnerable to evolving environmental challenges. It is crucial to expand the design focus of HPBs to include these aspects to enhance ...(+)



Ver más...



Energy-resilient performance-based generative design to adapt to future climate change using urban building energy model: A case study of residential block design

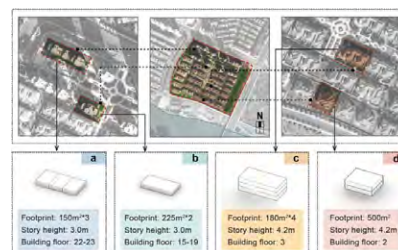
Fuente: Scindirect.com

Fecha: 01/09/2025

Infraestructuras



As global concern about climate change intensifies, optimizing building energy consumption, reducing carbon emissions, and enhancing urban energy resilience of buildings have emerged as critical priorities. This study presents a multi-objective optimization framework for urban residential blocks in the Yangtze River Delta, evaluating the impact of building morphology on energy performance and solar energy potential under future climate scenarios. Through performing parameter validation, parametric modeling, energy simulation, and multi-objective optimization using a real-world case study, the Pareto-opt...(+)



Ver más...



A Lightweight, AI-Enhanced Intrusion Detection System for Wireless Body Area Networks Using Unsupervised Anomaly Detection

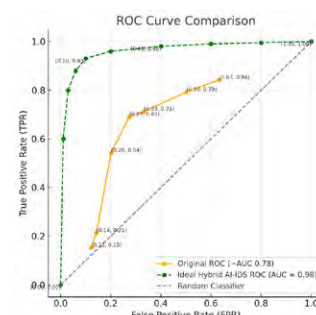
Fuente: Ijgis.org

Fecha: 30/08/2025

Ciberseguridad

Independent Researchers

The proliferation of Wireless Body Area Networks (WBANs) in remote healthcare monitoring has introduced unprecedented capabilities for patient care but also significant security vulnerabilities with life-threatening implications. Traditional intrusion detection systems (IDS), often relying on static signatures or simplistic rule-based anomaly detection, are ill-equipped to handle the dynamic and sophisticated nature of modern cyber threats, particularly zero-day attacks. This paper introduces a novel, hybrid, AI-enhanced IDS framework designed for the resource-constrained WBAN environment. The proposed ...(+)



Ver más...



Artificial intelligence in construction project management: Trends, challenges and future directions

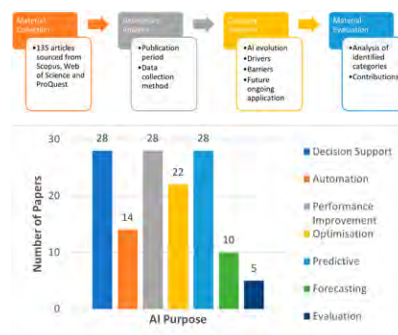
Fuente: Drarch.org

Fecha: 30/08/2025

Infraestructuras



Contemporary construction projects are characterized by escalating complexity, voluminous data flows, and stringent sustainability requirements, rendering conventional project management methods increasingly inadequate. In response, artificial intelligence (AI) has emerged as a transformative enabler in construction project management, offering advanced capabilities in predictive analytics, process automation, and intelligent decision support. This paper explores the role of AI in the identified principal functions of construction project management, including time management, cost estimation, qu...(+)



Ver más...



Climate-Resilient Ports and Waterborne Transport Systems: Current Status and Future Prospects

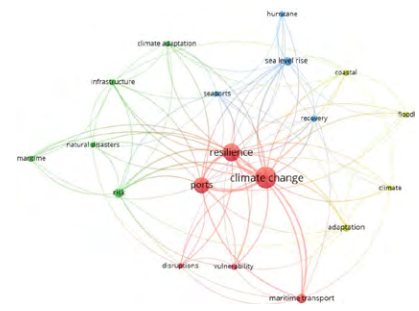
Fuente: Semanticscholar.org

Fecha: 26/08/2025

Infraestructuras



The increasing challenges posed by climate change necessitate a comprehensive examination of the resilience of waterborne transport systems. This paper explores the nexus of climate resilience, and waterborne transport, addressing the challenges faced by ports and their connecting waterborne transport systems. It provides an in-depth analysis of the current status of climate-resilient infrastructure and operations while emphasizing the transformative potential of emerging technologies. Through a systematic review, the paper identifies critical gaps and opportunities. Research predominantly emphasizes ...(+)



Ver más...



On the Trade-Off Between Sum-Rate and Energy Efficiency through the Convergence of HAPS and Active RIS Technologies

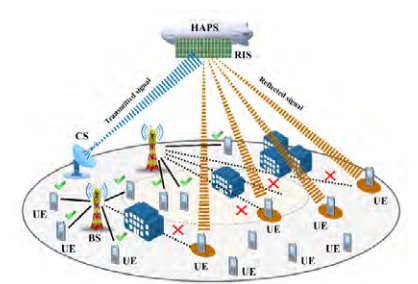
Fuente: Arxiv.org

Fecha: 18/08/2025

Comunicaciones



This paper investigates the integration of active reconfigurable intelligent surfaces (RIS) relay with high-altitude platform stations (HAPS) to enhance non-terrestrial network (NTN) performance in next-generation wireless systems. While prior studies focused on passive RIS architectures, the severe path loss and double fading in long-distance HAPS links make active RIS a more suitable alternative due to its inherent signal amplification capabilities. We formulate a sum-rate maximization problem to jointly optimize power allocation and RIS element assignment for ground user equipments (UEs) supported ...(+)



Ver más...



Enhancing system resilience to climate change through artificial intelligence: a systematic literature review

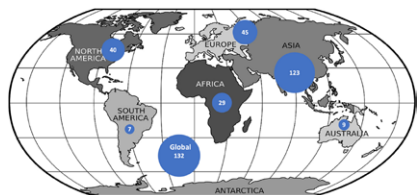
Fuente: Frontiersin.org

Fecha: 18/08/2025

Infraestructuras



The growing urgency of climate change necessitates innovative strategies to enhance system resilience across many sectors. Artificial Intelligence (AI) emerges as a transformative tool in this regard, yet existing research remains fragmented across sectors and regions. We conducted a systematic literature review of 385 peer-reviewed articles published between 2000 and early 2025, following the PRISMA protocol. The analysis classifies AI applications across nine key sectors and evaluates their relevance to adaptation, mitigation, or both. AI methodologies and regional distribution were also asses...(+)



Ver más...



Performance evaluation of low-bitrate voice using spread spectrum techniques for satellite-based emergency communication

Fuente: Scindirect.com

Fecha: 14/08/2025

Comunicaciones



This paper presents a resilient framework for real-time, low-bitrate voice communication across heterogeneous wireless networks in emergency Search and Rescue (SAR) operations. The system supports IP-based voice transmission from high-bitrate Wi-Fi networks to constrained Long Range (LoRa™) and Direct Sequence Spread Spectrum (DSSS) links. A key innovation is an adaptive flow control mechanism that manages link asymmetry, achieving over 98% successful packet delivery. The design extends existing emergency satellite communication channels by enabling voice support without disrupt...



Ver más...



Seismic assessment of unreinforced masonry façades from images using macroelement-based modeling

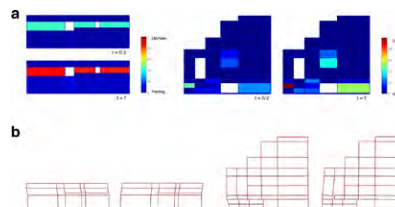
Fuente: Nature.com

Fecha: 14/08/2025

Infraestructuras



Despite the variability of urban infrastructure, unreinforced masonry buildings remain globally prevalent. Constructed from brick, hollow concrete blocks, stone, or other masonry materials, these structures account for a significant proportion of fatalities during seismic events—particularly in regions with limited access to early warning systems. Due to the complex behavior of masonry, accurately assessing structural vulnerabilities is highly dependent on the chosen modeling strategy. Yet, scalable, cost-effective approaches based on simple RGB imagery can still offer valuable insights. In this context, ...(+)



Ver más...



Enhancing IoT cybersecurity through lean-based hybrid feature selection and ensemble learning: A visual analytics approach to intrusion detection

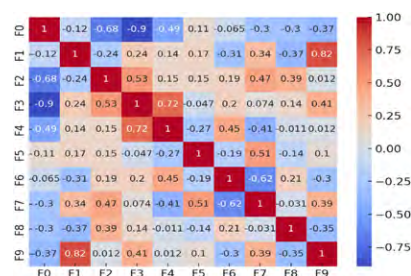
Fuente: Journals.plos.org

Fecha: 21/07/2025

Ciberseguridad



The dynamical growth of cyber threats in IoT setting requires smart and scalable intrusion detection systems. In this paper, a Lean-based hybrid Intrusion Detection framework using Particle Swarm Optimization and Genetic Algorithm (PSO-GA) to select the features and Extreme Learning Machine and Bootstrap Aggregation (ELM-BA) to classify the features is introduced. The proposed framework obtains high detection rates on the CICIDS-2017 dataset, with 100 percent accuracy on important attack categories, like PortScan, SQL Injection, and Brute Force. Statistical verification and visual evaluation me...



Ver más...

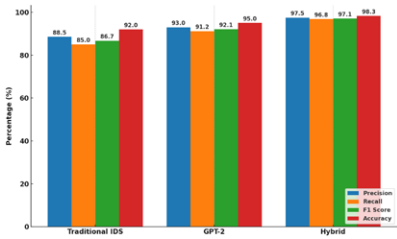


Hybrid LLM-Enhanced Intrusion Detection for Zero-Day Threats in IoT Networks

Fuente: Arxiv.org
Fecha: 10/07/2025
Ciberseguridad



This paper presents a novel approach to intrusion detection by integrating traditional signature-based methods with the contextual understanding capabilities of the GPT-2 Large Language Model (LLM). As cyber threats become increasingly sophisticated, particularly in distributed, heterogeneous, and resource-constrained environments such as those enabled by the Internet of Things (IoT), the need for dynamic and adaptive Intrusion Detection Systems (IDSs) becomes increasingly urgent. While traditional methods remain effective for detecting known threats, they often fail to recognize new and evo...(+)



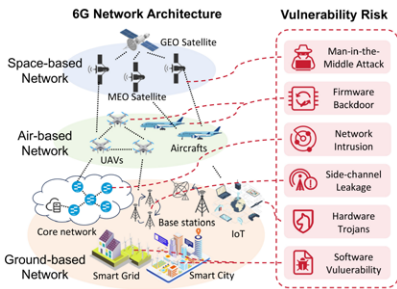
Ver más... ➔

Generative AI for Vulnerability Detection in 6G Wireless Networks: Advances, Case Study, and Future Directions

Fuente: Arxiv.org
Fecha: 25/06/2025
Ciberseguridad



The rapid advancement of 6G wireless networks, IoT, and edge computing has significantly expanded the cyberattack surface, necessitating more intelligent and adaptive vulnerability detection mechanisms. Traditional security methods, while foundational, struggle with zero-day exploits, adversarial threats, and context-dependent vulnerabilities in highly dynamic network environments. Generative AI (GAI) emerges as a transformative solution, leveraging synthetic data generation, multi-modal reasoning, and adaptive learning to enhance security frameworks. This paper explores the integration of GAI-pow...(+)



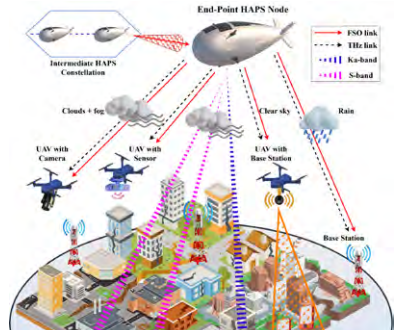
Ver más... ➔

On-Demand HAPS-Assisted Communication System for Public Safety in Emergency and Disaster Response

Fuente: Arxiv.org
Fecha: 12/06/2025
Comunicaciones



Natural disasters often disrupt communication networks and severely hamper emergency response and disaster management. Existing solutions, such as portable communication units and cloud-based network architectures, have improved disaster resilience but fall short if both the Radio Access Network (RAN) and backhaul infrastructure become inoperable. To address these challenges, we propose a demand-driven communication system supported by High Altitude Platform Stations (HAPS) to restore communication in an affected area and enable effective disaster relief. The proposed emerg...(+)



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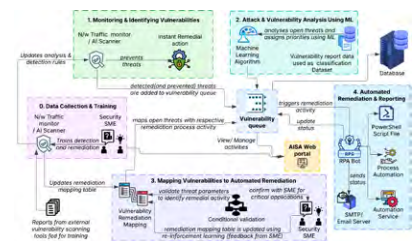
AI-based Cybersecurity Framework for Critical Infrastructure: Real-Time Threat Mitigation

Fuente: Arxiv.org
Fecha: 09/06/2025

Ciberseguridad

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UNIVERSITY

Critical infrastructure systems, including energy grids, healthcare facilities, transportation networks, and water distribution systems, are pivotal to societal stability and economic resilience. However, the increasing interconnectivity of these systems exposes them to various cyber threats, including ransomware, Denial-of-Service (DoS) attacks, and Advanced Persistent Threats (APTs). This paper examines cybersecurity vulnerabilities in critical infrastructure, highlighting the threat landscape, attack vectors, and the role of Artificial Intelligence (AI) in mitigating these risks. We propose a hybrid AI-dr...(+)



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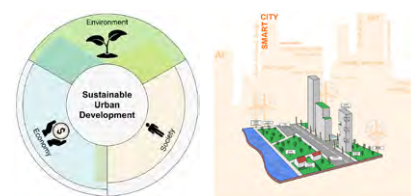
The Role of AI in Predictive Modelling for Sustainable Urban Development: Challenges and Opportunities

Fuente: Mdpi.com
Fecha: 03/06/2025

Infraestructuras

AUM

As urban populations continue to rise, cities face mounting challenges related to infrastructure strain, resource management, and environmental degradation. Sustainable urban development has emerged as a crucial strategy to balance economic growth, social equity, and environmental preservation. In this context, artificial intelligence offers transformative potential, particularly through predictive modeling, which enables data-driven decision making for more efficient and resilient urban planning. This paper explores the role of AI-powered predictive models in supporting sustainable urban deve...(+)



Ver más...



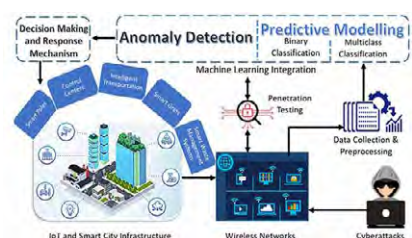
Penetration Testing and Machine Learning-Driven Cybersecurity Framework for IoT and Smart City Wireless Networks

Fuente: IEEE.org
Fecha: 14/05/2025

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The Internet of Things (IoT) technology development speed, along with its integration into smart city infrastructure, requires strong cybersecurity solutions to protect important systems. The research introduces an extensive framework to protect IoT systems and wireless networks through the integration of penetration testing method with anomaly detection and predictive modeling techniques. In this study, we collected real-time network traffic data as part of our methodology before performing penetration tests with Airmon-ng and Wireshark to create enriched attack scenario datasets. Anomalies were i...(+)



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