SmartLivingPlat

Plataforma Tecnológica de la Domótica
y las Ciudades Inteligentes

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SMART BUILDINGS
SMART CITIES
INDUSTRIA 4.0

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NOTICIAS

18 ways supply chain digital twins streamline logistics

Publicada en https://venturebeat.com, 25/04/2022.

Digital twins have become increasingly invaluable for enterprises to improve their supply chain planning. Whereas many digital twins simulate products or buildings, supply chain twins model the diffuse connections between raw materials

ver más...

What’s Next for IIoT Device Connectivity?

Publicada en https://www.automation.com, 22/04/2022.

April 22, 2022 - The Industrial Internet of Things (IIoT) has not only blurred the lines between OT and IT disciplines, but also led to the increasing prevalence of large-scale and highly distributed applications where field devices are dispersed over a wide area and need to communicate directly with remote servers.

ver más...

Volver al índice

Drones have transformed blood delivery in Rwanda

Publicada en https://www.wired.com/, 21/04/2022.

The autonomous aircraft have shuttled blood to rural, mountainous areas for years. A new analysis proves they’re faster than driving. Six years ago, Rwanda had a blood delivery problem. More than 12 million people live in the small East African country, and like those in other nations, sometimes they get into car accidents.

ver más...

El Ministerio de Industria lanza la línea de ayudas 'Activa Financiación' con 140 M€ para apoyar la transformación digital de la industria

Publicada en https://www.lamoncloa.gob.es/, 13/04/2022.

Para el secretario general de Industria y de la Pyme, Raül Blanco, "es fundamental el acompañamiento del Gobierno en estos procesos de modernización de la industria. Queremos modernizar y hacer más resistente y competitivo nuestro modelo productivo a través de la transformación digital, la economía verde y la innovación".

ver más...

Volver al índice

Playing with DALL·E 2

Publicada en https://www.lesswrong.com, 07/04/2022.

I got access to Dall·E 2 yesterday. Here are some pretty pictures! My goal was to try to understand what things DE2 could do well, and what things it had trouble understanding or generating. My general hypothesis is that it would do a better job with things that are easy to find on the internet (cute animals, digital scifi things, famous art) and less well with more abstract or more unusual things.

ver más...

Energy efficiency guru Amory Lovins: ‘it’s the largest, cheapest, safest, cleanest way to address the crisis’

Publicada en https://www.theguardian.com, 26/03/2022.

One of the leading advocates of energy conservation explains why this could be a turning point for climate economics Temperatures dropped far below freezing this week in Snowmass, Colorado. But Amory Lovins, who lives high up in the mountains at 7,200ft above sea level, did not even turn on the heating.

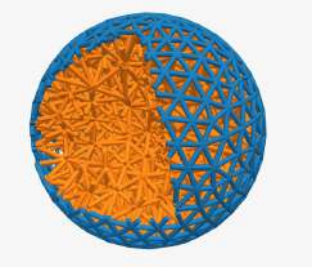
ver más...

Volver al índice

The next generation of robots will be shape-shifters

Publicada en ScienceDaily, 11/03/2022.

Physicists have discovered a new way to coat soft robots in materials that allow them to move and function in a more purposeful way. The research, led by the University of Bath, is described today in Science Advances.



ver más...

Researchers develop hybrid human-machine framework for building smarter AI

Publicada en ScienceDaily, 07/03/2022.

Creating smarter, more accurate artificial intelligence systems requires a hybrid human-machine approach, according to researchers. In a new study, they present a new mathematical model that can improve performance by combining human and algorithmic predictions and confidence scores.

ver más...

Volver al índice

Simulated human eye movement aims to train Metaverse platforms

Publicada en ScienceDaily, 07/03/2022.

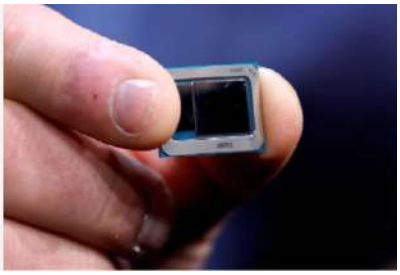
Computer engineers have developed virtual eyes that simulate how humans look at the world accurately enough for companies to train virtual reality and augmented reality programs. Called EyeSyn for short, the program will help developers create applications for the rapidly expanding metaverse while protecting user data.

ver más...

Wooing Intel, Italy plans $4.6 billion fund to boost chipmaking

Publicada en https://www.reuters.com, 01/03/2022.

ROME, March 1 (Reuters) - Italy plans to set aside more than 4 billion euros ($4.6 billion) until 2030 to boost domestic chip manufacturing as it seeks to attract more investment from tech companies such as Intel, a draft decree seen by Reuters showed on Tuesday. The government is trying to persuade the U.S. group to spend billions of euros on an advanced chipmaking plant in Italy that uses innovative technologies to weave full chips.



ver más...

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EMPRESAS Y MERCADOS

Meta Reports First Quarter 2022 Results

Publicada en https://investor.fb.com, 27/04/2022.

MENLO PARK, Calif., April 27, 2022 /PRNewswire/ -- Meta Platforms, Inc. (Nasdaq: FB) today reported financial results for the quarter ended March 31, 2022.

ver más...

What Is XR, and How Is It Radically Transforming Industries?

Publicada en https://redshift.autodesk.com, 26/04/2022.

Extended reality (XR) has been seeping into modern life for decades. From virtual reality (VR) arcade games in the early ’90s to the millions of augmented reality (AR) lenses available on Snap AR, the evolution of XR is gaining steam. According to the research group Statista, the global XR market size, forecast at $31 billion in 2021, is expected to swell to $300 billion by 2024.

ver más...

Volver al índice

This wild lincoln EV concept has 3 unbelievably awesome features

Publicada en https://www.inverse.com, 24/04/2022.

THE IMMINENT RELEASE of the new Ford F-150 Lightning electric pickup might be getting all the attention in the EV world right now, but Ford's luxury brand is hard at work on a series of all-electric vehicles that could change how we think EVs — and transportation in general.

ver más...

KUKA Showcases End-to-End Automation Solutions and Advanced Vision Capabilities at Automate 2022

Publicada en https://www.automation.com, 21/04/2022.

April 19, 2022 - At Automate 2022, attendees will have the opportunity to experience how complete, end-to-end automation solutions from KUKA Robotics can help them exceed their production goals.

ver más...

Volver al índice

Photorealistic Monocular 3D Reconstruction of Humans Wearing Clothing

Publicada en https://arxiv.org/abs/2204.08906, 19/04/2022.

Given a single image, we reconstruct the full 3D geometry – including self-occluded (or unseen) regions – of the photographed person, together with albedo and shaded surface color. Our end-to-end trainable pipeline requires no image matting and reconstructs all outputs in a single step.

ver más...

Wohlers Report 2022

Publicada en https://wohlersassociates.com, 19/03/2022.

Creating Wohlers Report 2022 would have been impossible without our team of 93 experts and 250 contributing organizations from around the world. The publication requires months of a coordinated planning and effort among the principal and associate authors, contributors, and many others.

ver más...

Volver al índice

Honeywell to help create smart cities throughout the us

Publicada en Environmental Leader, 08/03/2022.

Honeywell and Duke Energy Sustainable Solutions (DESS) announced today an agreement to jointly develop and deliver comprehensive energy resiliency solutions to targeted markets across the United States. The post Honeywell to Help Create Smart Cities Throughout the US appeared first on Environment + Energy Leader.

ver más...

Volver al índice

PATENTES

Additive manufacturing device, method, and medical product relating thereto

Publicada en Patentscope_Domótica, 21/04/2022.

Solicitantes: KUMOVIS GMBH [DE]/[DE]
The invention relates to an additive manufacturing device (14), in particular a 3D printer, for manufacturing at least one component (10) formed layer by layer, the device comprising: at least one construction chamber (16); at least one extrusion head (18) that is three-dimensionally movable inside the construction chamber (16); and at least one open-loop and/or closed-loop control device for open-loop and/or closed-loop control of the extrusion head (18)

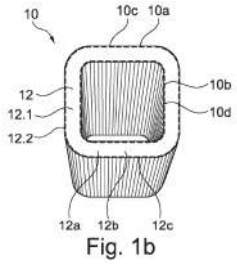


Fig. 1b

ver más...

Building controller with antenna

Publicada en Patentscope_Domótica, 21/04/2022.

Solicitante: HONEYWELL INTERNATIONAL INC
A wall module for a building control system includes a back plate with one or more mounting features for mounting the backplate to a wall. A main body includes one or more attachment features for removably attaching the main body to the back plate. The main body also includes a front side and a back side, wherein at least part of the front side is formed by a front plate.

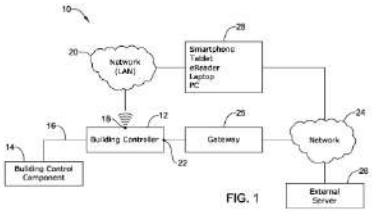


FIG. 1

ver más...

Volver al índice

Control method and control device for smart home appliance group

Publicada en Patentscope_Domótica, 21/04/2022.

Solicitantes: CHONGQING HAIER AIR CONDITIONER CO., LTD [CN]
A control method and a control device for a smart home appliance group. The control method comprises: acquiring an authorization instruction used to authorize the use of a work environment, wherein the authorization instruction comprises information of a control terminal allowed to use the work environment, and authorization level information; acquiring information of a smart home appliance group working in the work environment, wherein the smart home appliance group comprises one or more smart home appliances

ver más...

Process control method for a 3d-printing process

Publicada en Patentscope_Domótica, 15/04/2022.

Solicitante: IVOCLAR VIVADENT AG
A process control method for a 3D-printing process, in particular a stereolithography process and/or a DLP (digital light processing) process, using a 3D printer is provided. The 3D printer has a building platform, a light source, a receiving device for printing material and a control device by means of which an item can be produced layer-wise or continuously from the printing material.

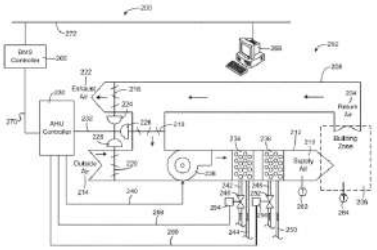
ver más...

Volver al índice

Building system with an in-zone plume control system

Publicada en Patentscope_Domótica, 14/04/2022.

Solicitante: Johnson Controls Tyco IP Holdings LLP
A building system of a building includes an in-zone plume control system located within a zone of the building, the in-zone plume control system including one or more return air inlets comprising openings to receive one or more air plumes generated by one or more users.

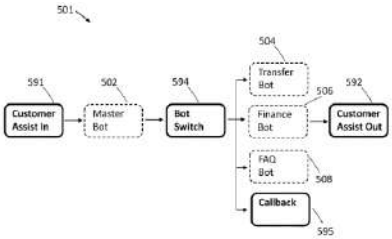


ver más...

Integrated orchestration of intelligent systems

Publicada en Patentscope_Domótica, 14/04/2022.

Solicitante: TTEC Digital, LLC
Systems and methods for integrated orchestration of intelligent systems. An intelligent systems orchestration system harvests and combines aspects of disparate intelligent systems for use in intelligent virtual assistant applications and automation applications. In one aspect, the system provides an intelligent orchestration between cognitive plugins, such as natural language processing, sentiment analysis, speech recognition, text-to-speech, and computer vision.



ver más...

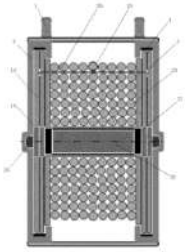
Volver al índice

Intelligent life-saving system for high-rise building and electromechanical device for intelligent fast descent

Publicada en Patentscope_Domótica, 14/04/2022.

Solicitante: Qiushi YE

The present invention discloses an intelligent life-saving system for a high-rise building and an electromechanical device for intelligent fast descent. The life-saving system includes a coverall with short-term high temperature resistance, cushioning and collision resistance, an oxygen-supplying helmet, a high-temperature resistant sling, and an electromechanical device for intelligent fast descent.



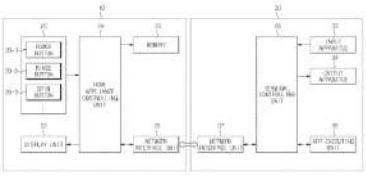
ver más...

Network system of home appliance and network setup method of the same

Publicada en Patentscope_Domótica, 14/04/2022.

Solicitante: Samsung Electronics Co., Ltd.

A home appliance includes a first communication circuitry configured to communicate with a mobile terminal placed within a first communication range supporting a first communication method, a second communication circuitry configured to communicate with an external wireless access point apparatus placed within a second communication range supporting a second communication method



ver más...

Volver al índice

Smart home system with firearm tracking

Publicada en Patentscope_Domótica, 14/04/2022.

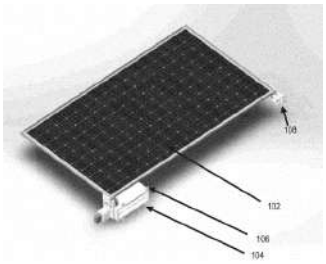
Solicitante: Patrice Mogaka
A smart home system with firearm tracking includes a sensor network installed within a building and a control panel including an input mechanism, a display screen, a wireless transceiver, and a scanning mechanism. The system is configured to monitor at least one firearm that has an ammunition sensor, a GPS sensor, a wireless transceiver, and a magazine having a unique scannable QR code.

ver más...

Systems and methods for conserving thermal and electrical energy usage in buildings and houses

Publicada en Patentscope_Domótica, 14/04/2022.

Solicitante: The Regents of the University of Colorado, a body corporate
Systems and methods of use of movable shading devices, are disclosed. In some example implementations, the system can include one or more movable shading devices, where the one or more movable shading devices are configured to be selectively moveable, based on control by a programmable controller, with respect to an external surface of a building or house, where the external surface of the building or house includes at least one wall surface and at least one roof surface,



ver más...

Volver al índice

A virtual reality based security system for vacant homes

Publicada en Patentscope_Domótica, 08/04/2022.

Solicitante: Lovely Professional University
The present invention relates to a virtual reality based security system for the vacant homes. The present invention consists of relay control units (105), a customized light controller (102), a RTC counter module (103), and light sensors (101). In the present invention, real environment is portrayed related to the presence of occupants in the vacant home by employing lights sequencing algorithm which switches on/off lights at different intervals every day

ver más...

Intelligent automation and control of smart wheelchair appliances for disabled individuals using iot and machine learning

Publicada en Patentscope_Domótica, 08/04/2022.

Solicitante: Ms.M.Rathi, Kings Engineering College et al.
The eye-gazing wheelchair is a unique device that is mostly utilized by impaired persons who are fully immobile. Manual wheelchair control is replaced in this technology with automated wheelchair control, which is controlled by ocular movement, allowing patients to feel and maneuver with less or no difficulty. A camera captures a continuous image, which is subsequently subjected to various image processing algorithms.

ver más...

Volver al índice

Control method for smart home system

Publicada en Patentscope_Domótica, 07/04/2022.

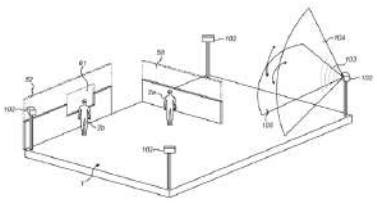
Solicitante: QINGDAO HAIER WASHING MACHINE CO., LTD. [CN]
A control method for a smart home system, the smart home system comprising a smart socket and a laundry treatment device, wherein the laundry treatment device is electrically connected to the smart socket. The control method comprises: measuring electricity consumption parameters of a laundry treatment device by means of a smart socket; determining operation information of the laundry treatment device according to the electricity consumption parameters; determining the amount of detergent consumed by the laundry treatment device according to the operation information

ver más...

Displaying a virtual image of a building information model

Publicada en Patentscope_Domótica, 07/04/2022.

Solicitante: XYZ REALITY LIMITED
A headset for use in displaying a virtual image of a building information model (BIM) in relation to a site coordinate system of a construction site. The headset comprises an article of headwear having one or more position-tracking sensors mounted thereon, augmented reality glasses incorporating at least one display, a display position tracking device for tracking movement of the display relative to at least one of the user's eyes and an electronic control system.



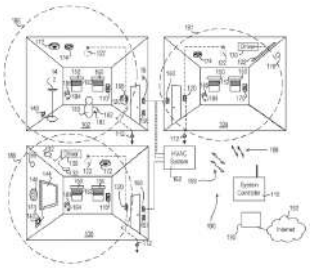
ver más...

Volver al índice

Load control system responsive to the location of an occupant and/or mobile device

Publicada en Patentscope_Domótica, 07/04/2022.

Solicitantes: Lutron Technology Company LLC
A load control system for controlling an electrical load in a space of a building occupied by an occupant may include a controller configured to determine the location of the occupant, and a load control device configured to automatically control the electrical load in response to the location of the occupant.



ver más...

Method and system for controlling laundry processing device and device

Publicada en Patentscope_Domótica, 07/04/2022.

Solicitante: QINGDAO HAIER WASHING MACHINE CO., LTD. [CN]
A method and system for controlling a laundry processing device and equipment. The method comprises: after washing has finished, by detecting and determining whether, when configuring a washing program, a laundry processing device has been set with a subsequent operation at the end of washing, such as shaking loose and/or drying

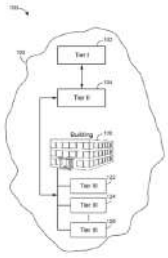
ver más...

Volver al índice

System for and method of detecting communication security in building automation and control networks

Publicada en Patentscope_Domótica, 07/04/2022.

Solicitante: Johnson Controls Technology Company
A building system includes heating ventilation or air conditioning (HVAC) devices configured for communication on a building automation network and a communication engine. The communication engine is configured to provide a diagnostic attribute.



ver más...

Systems and methods for generating spectator images of an artificial reality environment

Publicada en https://worldwide.espacenet.com, 01/04/2022.

Solicitante: Facebook Technologies LLC [US]
A method includes a computing system receiving a first-person image that captures an artificial-reality environment from a first-person perspective of a user of a head-mounted device, wherein the first-person image is rendered based on a pose of the head-mounted device.

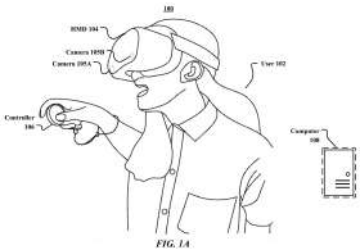


FIG. 1A

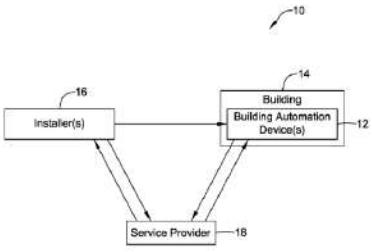
ver más...

Volver al índice

Systems and methods of verifying installation of building automation devices

Publicada en Patentscope_Domótica, 31/03/2022.

Solicitante: Honeywell International Inc.
Methods and systems may be configured to verify proper installation of Internet Protocol (IP) connectable building automation devices by installers at remote sites. The installers may be a crowdsourced installers.



ver más...

Intelligent home automation using iot and machine learning

Publicada en Patentscope_Domótica, 25/03/2022.

Solicitante: Hindustan College of Arts & Science
Home Automation may be utilized to keep a house in a pleasant state. The less the user has to engage with the system, the easier it is to use. To automate the room's equipment and peripherals, you may utilize faces as a key. Pre-selected gadgets turn on automatically as soon as a person enters the room, so there's no need to be manually activated.

ver más...

Volver al índice

Room automation system using iot

Publicada en Patentscope_Domótica, 25/03/2022.

Solicitante: Bibhudendu Panda, et al.
ABSTRACTT his work aims to solve problems of common peoples in day to day life. Atomizing home with using node MCU which is Wi-Fi model and using blynk app. Blynk app is used as third party app. It provide open source to user make to design automation in less price. Different sensors are connected to node MCU and can operate from any part of world with help of Blynk app.

ver más...

Iot based home automation

Publicada en Patentscope_Domótica, 18/03/2022.

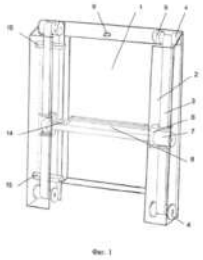
Solicitante: AKMAL RAFI
Proposed system has two advantages.1.Using the IoT connectivity, we can monitor and access our smart home easily from anywhere, which will definitely will prove to be energy efficient.2.It act has a helping hand for the old age and differently abled person.

ver más...

Automated window-cleaning device

Publicada en Patentscope_Domótica, 17/03/2022.

Solicitante: SHEVCHENKO, Viktor Mikhaylovich [RU]
The invention relates to the field of washing and cleaning building facilities. The aim of the invention is to create an automated device for safely and efficiently cleaning the outside surfaces of windows situated at any height.



ver más...

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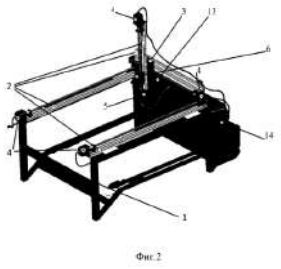
Autonomous robotic system for point control of weeds

Publicada en Patentscope_Domótica, 17/03/2022.

FIELD: agriculture; machine building. SUBSTANCE: invention relates to agricultural machine building, in particular to complexes for weed control. Autonomous system for point control of weeds contains a frame with three horizontal and one vertical guides and a carriage installed on them, connected to a control unit and driven by four stepper motors.

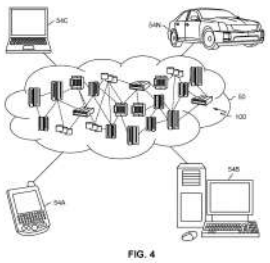


ver más...

Focus-object-determined communities for augmented reality users

Publicada en https://worldwide.espacenet.com/, 15/03/2022.

Solicitante: IBM [US]
According to one embodiment, a method, computer system, and computer program product for creating a social network in augmented reality (AR) based on focus objects is provided. The present invention may include monitoring an augmented reality session of a user; detecting focus objects of a user during the augmented reality session;



ver más...

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Deep learning model inspired automatic door lock system for avoiding the collision with obstacles during opening the car door

Publicada en Patentscope_LED, 04/03/2022.

Solicitante: UTTARANCHAL UNIVERSITY.
Deep learning model Inspired Automatic Door Lock System for Avoiding the Collision with obstacles During Opening the Car Door Discloses herein a Deep learning model Inspired Automatic Door Lock System for Avoiding the Collision with obstacles During Opening the Car Door comprises Controller Unit(80), Car Lock System (81), Xbee Pro-S Module includes Bluetooth 5 module, Battery Power Supply

ver más...

Low-cost home automation using iot principles

Publicada en Patentscope_Domótica, 04/03/2022.

Solicitantes: Dr.S.Prabu et al.
Given the scenario presented, this work aims to propose a low-cost model for the application of home automation as a comfort, independence and entertainment tool in common homes, considering the available wireless communication technologies and low-cost devices for its operation.

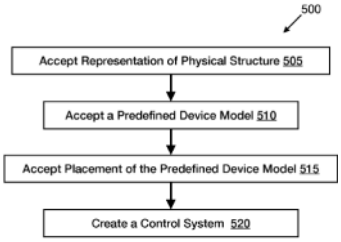
ver más...

Volver al índice

Building automation programming using ui representations of physical models

Publicada en Patentscope_Domótica, 03/03/2022.

Solicitante: PassiveLogic, Inc.
A controller is described that a building design can be input into, the building design comprising inputting a layout, predefined resources and positions for resources. within the layout.

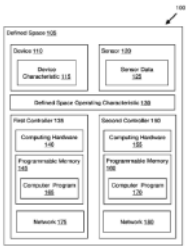


ver más...

Distributed building automation controllers

Publicada en Patentscope_Domótica, 03/03/2022.

Solicitante: PassiveLogic, Inc.
Controllers that control a building's state functions can be controlled by a master controller that the controllers choose themselves. The master controller communicates with the controllers and sensors to determine when a building state should change.



ver más...

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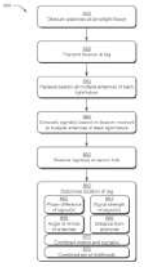
Light fixture of building automation system

Publicada en Patentscope_Domótica, 03/03/2022.

Solicitante: enLighted, Inc.
There is described a building automation system comprising a mobile tag, sensor devices, and a sensor hub. The mobile tag transmits a broadcast beacon based on RF technology. The sensor devices are co-located with light fixtures and include antennas for receiving a broadcast beacon.

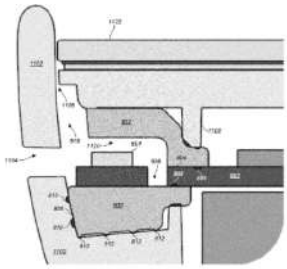


ver más...

Temperature sensor isolation in smart-home devices

Publicada en Patentscope_Domótica, 03/03/2022.

Solicitante: Google LLC
A smart-home device may include a housing, a printed circuit board (PCB) inside the housing, an environmental sensor mounted to the PCB inside the housing, and a gasket that encloses the environmental sensor inside the housing



ver más...

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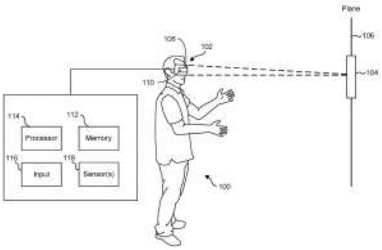
Virtual keyboard

Publicada en https://worldwide.espacenet.com, 03/03/2022.

Solicitante: QUALCOMM INC [US]

Systems, apparatuses (or devices), methods, and computer-readable media are provided for generating virtual content. For example, a device (e.g., an extended reality device) can obtain an image of a scene of a real-world environment, wherein the real-world environment is viewable through a display of the extended reality device as virtual content is displayed by the display.



ver más...

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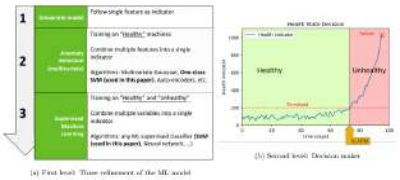
A two-level machine learning framework for predictive maintenance: comparison of learning formulations

Publicada en https://arxiv.org, 21/04/2022.

Predicting incoming failures and scheduling maintenance based on sensors information in industrial machines is increasingly important to avoid downtime and machine failure. Different machine learning formulations can be used to solve the predictive maintenance problem.

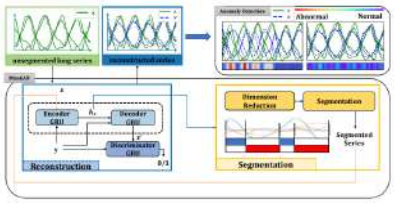


ver más...

Multi-scale Anomaly Detection for Big Time Series of Industrial Sensors

Publicada en https://arxiv.org, 18/04/2022.

Given a multivariate big time series, can we detect anomalies as soon as they occur? Many existing works detect anomalies by learning how much a time series deviates away from what it should be in the reconstruction framework.



ver más...

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VQGAN-CLIP: Open Domain Image Generation and Editing with Natural Language Guidance

Publicada en https://arxiv.org, 18/04/2022.

Generating and editing images from open domain text prompts is a challenging task that heretofore has required expensive and specially trained models. We demonstrate a novel methodology for both tasks which is capable of producing images of high visual quality from text prompts of significant semantic complexity without any training

ver más...

Sustainability and The Smart Home: The Challenges of an Interconnected Environment

Publicada en Tecnologías Inteligentes, 09/03/2022.

This paper would like to be a bridge between technical and legal knowledge as far as the construction of environmentally sustainable and privacy compliant homes is concerned. Uniting data protection law as the leading legal subject guiding us through the Digital Revolution with the SDG30 objectives is already the preferable option for housing in unsettled times like the ones we are living. This paper will analyse the actual weakness of the current smart home from a data protection point of view [...]

ver más...

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Aproximació a la traducció automàtica parlada amb altaveus intel·ligents

Publicada en Tecnologías Inteligentes, 08/03/2022.

Vivim en un món en què la tecnologia ha arribat a tots el àmbits. Ara com ara els altaveus intel·ligents s'estan provant per fer traduccions, ja que ens permeten fer consultes sense treure les mans del teclat. En aquest treball, provarem de traduir unitats lingüístiques per veu del castellà a l'anglès i al francès, per concloure quin dels altaveus tradueix millor i per tant, ens serviria més. ; Vivimos en un mundo en el que la tecnología ha llegado a todos los ámbitos. Hoy en día, los altavoces [...]

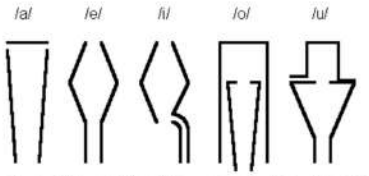

Figura 1. Formes de l'aparell que va presentar Kratzenstein a St. Petesburg (Schroeder 1993)

ver más...

Combining individual and joint networking behavior for intelligent iot analytics

Publicada en https://arxiv.org/, 07/03/2022.

The IoT vision of a trillion connected devices over the next decade requires reliable end-to-end connectivity and automated device management platforms. While we have seen successful efforts for maintaining small IoT testbeds, there are multiple challenges for the efficient management of large-scale device deployments.

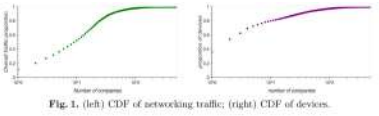
Fig. 1. (left) CDF of networking traffic; (right) CDF of devices.

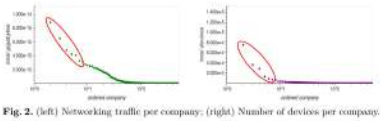
Fig. 2. (left) Networking traffic per company; (right) Number of devices per company.

ver más...

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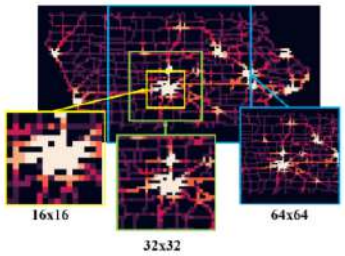
HintNet: Hierarchical Knowledge Transfer Networks for Traffic Accident Forecasting on Heterogeneous Spatio-Temporal Data

Publicada en https://arxiv.org, 07/03/2022.

Traffic accident forecasting is a significant problem for transportation management and public safety. However, this problem is challenging due to the spatial heterogeneity of the environment and the sparsity of accidents in space and time.



ver más...

Systematic review analysis on smart building: challenges and opportunities

Publicada en Tecnologías Inteligentes, 06/03/2022.

Smart building technology incorporates efficient and automated controls and applications that use smart energy products, networked sensors, and data analytics software to monitor environmental data and occupants' energy consumption habits to improve buildings' operation and energy performance. Smart technologies and controls are becoming increasingly important not only in research and development (r&d) but also in industrial and commercial domains, leading to a steady growth in their application[...]

ver más...

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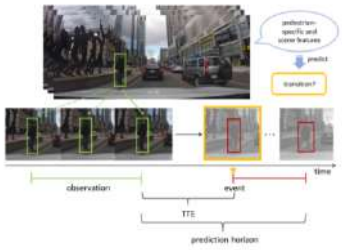
Pedestrian Stop and Go Forecasting with Hybrid Feature Fusion

Publicada en https://arxiv.org/, 04/03/2022.

Forecasting pedestrians' future motions is essential for autonomous driving systems to safely navigate in urban areas. However, existing prediction algorithms often overly rely on past observed trajectories and tend to fail around abrupt dynamic changes, such as when pedestrians suddenly start or stop walking.

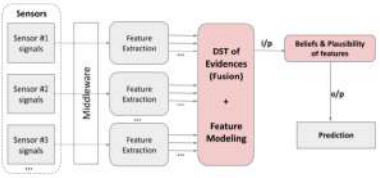


ver más...

Explaining RADAR features for detecting spoofing attacks in Connected Autonomous Vehicles

Publicada en https://arxiv.org, 01/03/2022.

Connected autonomous vehicles (CAVs) are anticipated to have built-in AI systems for defending against cyberattacks. Machine learning (ML) models form the basis of many such AI systems. These models are notorious for acting like black boxes



ver más...

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