SmartLivingPlat

Plataforma Tecnológica de la Domótica y las Ciudades Inteligentes

Boletín de Vigilancia Tecnológica

MAYO - JUNIO 2023

SMART BUILDINGS
SMART CITIES
INDUSTRIA 4.0

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NOTICIAS

Robotaxis are here. It’s time to decide what to do about them

Publicada en https://www.technologyreview.com, 23/06/2023.

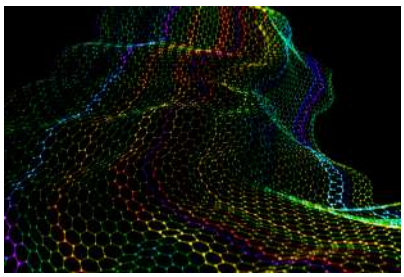
In some San Francisco neighborhoods, at certain hours of the night, it seems as if one in 10 cars on the road has no driver behind the wheel. These are not experimental test vehicles, and this is not a drill. Many of San Francisco’s ghostly driverless cars are commercial robotaxis, directly competing with taxis, Uber and Lyft, and public transit. They are a real, albeit still marginal, part of the city’s transportation system.

ver más...

Physicists discover a new switch for superconductivity

Publicada en https://news.mit.edu, 22/06/2023.

Under certain conditions — usually exceedingly cold ones — some materials shift their structure to unlock new, superconducting behavior. This structural shift is known as a “nematic transition,” and physicists suspect that it offers a new way to drive materials into a superconducting state where electrons can flow entirely friction-free.



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Spain has produced enough renewable energy to power its entire country for a 9-hour work day

Publicada en https://www.businessinsider.com, 21/05/2023.

For nine hours on Tuesday, Spain was able to power itself entirely with renewable energy. Wind, solar, and water energy powered mainland Spain from 10 a.m. to 7 p.m. one day last week. The record shows the expanding use of renewable energy.

ver más...

The Futures of Metaverse and the Creative Industries in Latin America: A Workshop Experience at CENTRO, Mexico

Publicada en https://jfsdigital.org, 20/05/2023.

The following paper describes the achievements of a foresight workshop designed and executed through 2022 to identify the long-term scenarios created by undergraduate students concerning the metaverse and the creative industries in Latin America.

ver más...

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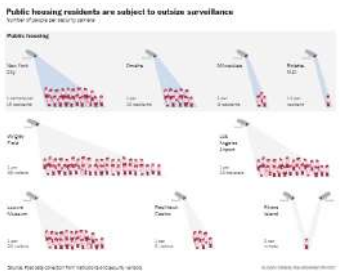
Eyes on the poor: Cameras, facial recognition watch over public housing

Publicada en https://www.washingtonpost.com/, 16/05/2023.

Surveillance cameras purchased with federal crime-fighting grants are being used to punish and evict public housing residents, sometimes for minor rule violations, a Washington Post investigation found

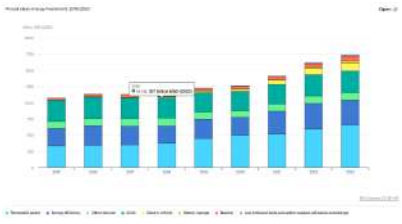


ver más...

IEA's World Energy investment Report May 2023

Publicada en https://www.iea.org, 15/05/2023.

This new World Energy Investment 2023 (WEI 2023) report is the eighth in our annual series where we provide the global benchmark for tracking capital flows in the energy sector. The last few years have been a period of extreme disruption for the energy sector. The new WEI 2023 offers an opportunity to take stock of what this has meant for investment, and what those investments might mean in turn for the future security and sustainability of the energy sector.



ver más...

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What happens when Google Search doesn’t have the answers?

Publicada en https://www.theverge.com/, 08/05/2023.

After controlling how information has been distributed for the past 25 years, Google Search faces a set of challenges that will change the company — and the internet — forever.

ver más...

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EMPRESAS Y MERCADOS

First battery train in Europe completes phase one roll out

Publicada en https://www.hitachirail.com, 27/06/2023.

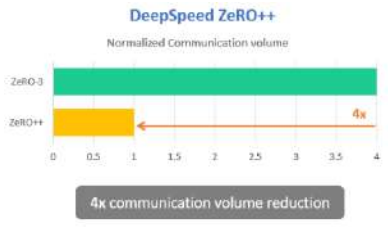
Success of Hitachi Rail's "tribrid" train demonstrates roadmap for decarbonisation across the continent. First European fleet able to operate on battery, electric and diesel power completes phase one of roll out in Italy

ver más...

DeepSpeed ZeRO++: A leap in speed for LLM and chat model training with 4X less communication

Publicada en https://www.microsoft.com/, 22/06/2023.

Large AI models are transforming the digital world. Generative language models like Turing-NLG, ChatGPT, and GPT-4, powered by large language models (LLMs), are incredibly versatile, capable of performing tasks like summarization, coding, and translation.



ver más...

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AlphaDev discovers faster sorting algorithms

Publicada en https://www.deepmind.com, 07/06/2023.

New algorithms will transform the foundations of computing
Digital society is driving increasing demand for computation, and energy use. For the last five decades, we relied on improvements in hardware to keep pace. But as microchips approach their physical limits, it’s critical to improve the code that runs on them to make computing more powerful and sustainable. This is especially important for the algorithms that make up the code running trillions of times a day.

ver más...

The Logistics Trends Radar

Publicada en https://www.dhl.com, 16/05/2023.

The Era of Logistics is here. Never has the importance of supply chains been more widely acknowledged by societies in connecting people and improving lives. On an unprecedented level, we are seeing businesses transform logistics from a quiet, back-end operation into a strategic asset and value driver.

ver más...

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Language models can explain neurons in language models

Publicada en https://openai.com, 09/05/2023.

We use GPT-4 to automatically write explanations for the behavior of neurons in large language models and to score those explanations. We release a dataset of these (imperfect) explanations and scores for every neuron in GPT-2.

ver más...

Auto boss says EV market share could hit 80 pct in China in 2025

Publicada en https://thedriven.io, 08/05/2023.

The founder and CEO of Chinese car manufacturing Li Auto says electric vehicles sales could hit a staggering 80 per cent of all new cars sold in China by the end of 2025. “By December 2025, NEVs will account for more than 80 per cent of all new vehicle sales in China” said Li Xiang on his WeChat account.

ver más...

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OpenAI’s regulatory troubles are only just beginning

Publicada en https://www.theverge.com/, 05/05/2023.

The European Union’s fight with ChatGPT is a glance into what’s to come for AI services. OpenAI managed to appease Italian data authorities and lift the country’s effective ban on ChatGPT last week, but its fight against European regulators is far from over.

ver más...

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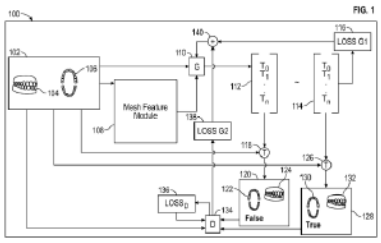
PATENTES

Geometric deep learning for setups and staging in clear tray aligners

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

SOlicitante: 3M INNOVATIVE PROPERTIES COMPANY [US]
Systems and techniques are described for training and using a generative adversarial network (GAN) to produce intermediate stages and final setups for clear tray aligners (CTAs) including receiving, by one or more computer processors, a first digital representation of a patient's teeth, using, by the one or more computer processors and to determine a prediction for one or more tooth movements, a generator that is a neural network included in a GAN and that has been trained to predict one or more tooth movements, and producing

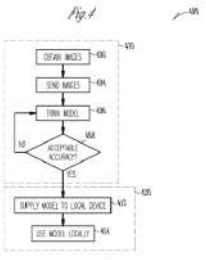


ver más...

Led array optimization using artificial neural networks

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: LUMILEDS LLC [US]
An illumination arrangement in a mobile device is provided that uses an artificial neural network (ANN) to correct an image of a scene. The mobile device has an illumination apparatus with an LED array that emits light to illuminate a scene. The LED array has LEDs, separated by borders, that are independently driven. A camera has a sensor to capture an image of the scene. The ANN has a training mode in which the ANN is trained using a set of images captured by the camera to generate parameters. The ANN is trained offline in a cloud network. A processor uses the trained ANN in an inference mode to correct the image.



ver más...

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Machine learning (ML) model management in 5G core network

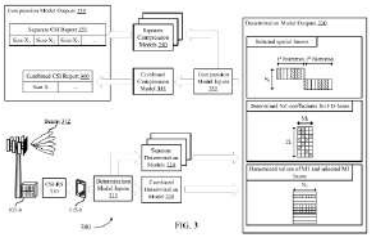
Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) [SE]
Embodiments include methods for a first network node or function (NNF) configured for machine learning (ML) model management in a communication network. Such methods include receiving, from a second NNF of the communication network, a first message including: one or more ML model identifiers corresponding to one or more ML models maintained by the first node, or an identifier of an analytic based on the ML model(s).

ver más...

Machine learning models for precoding

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.



Solicitante: QUALCOMM INCORPORATED [US]
Methods, systems, and devices for wireless communication at a user equipment (UE) are described. A user equipment (UE) may receive a control message from a base station indicating a machine learning model for generating or compressing one or more components of a precoding matrix indicator. The UE may determine or compress the one or more components of the precoding matrix indicator in accordance with the machine learning model and based on a characteristic of a wireless channel. The UE may transmit a precoding matrix indicator message including the one or more components of the precoding matrix indicator that are determined or compressed in accordance with the machine learning model.

ver más...

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Method and apparatus for constructing read-write set of blockchain smart contract

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: webank [CN]
Provided in the present application are a method and apparatus for constructing a read-write set of a blockchain smart contract. The method comprises: when a smart contract to be processed is compiled, dividing the smart contract into one or more basic blocks; on the basis of the one or more basic blocks, establishing a corresponding control flow graph; then, on the basis of the control flow graph, determining a code statement, which initiates a blockchain storage read-write request, in each basic block in the graph; determining a target data source according to the code statement; and constructing a read-write set of the smart contract according to the target data source.

ver más...

Method and system for generating fault data of industrial robot, terminal, and storage medium

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: SHENZHEN INSTITUTES OF ADVANCED TECHNOLOGY [CN]
The present application relates to a method and system for generating fault data of an industrial robot, a terminal, and a storage medium. The method comprises: extracting real fault data of an industrial robot, labeling category tags for the real fault data according to fault categories, and using the category tags as condition information and generating a real fault data set together by the condition information and the real fault data

ver más...

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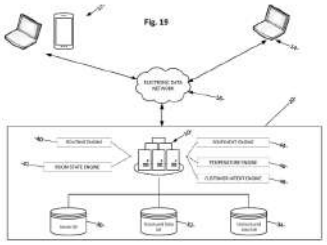
Methods and systems for a cloud-based, intelligent and interactive virtual container based customer service platform

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitnate: Zingly [US]
Systems and methods provide a cloud-based intelligent and interactive customer service platform that includes a communication manager, customer app, agent app, a virtual container (e.g. room) for communication, a natural language processor, voice processor, image processor, video processor, and an inference processor exposed by application programming interfaces; and executing an agent picker functionality within the automation infrastructure that performs operations comprising: receiving a communication from a customer



ver más...

Neural network-based apparatus parameter acquisition method and system, and related component

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

SOlicitante: INSPUR ELECTRONIC INFORMATION INDUSTRY CO., LTD. [CN]
The present application discloses a neural network-based apparatus parameter acquisition method, system, and device, and a non-volatile computer readable storage medium. The neural network-based apparatus parameter acquisition method comprises using a neural network composed of an inverse network, a discriminant network, and a forward prediction network as a target electromagnetic spectral response to optimize a corresponding apparatus parameter.

ver más...

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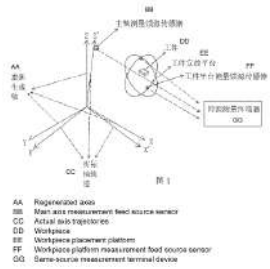
New intelligent machine tool machining system

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: YU, Yinghao [CN]
Disclosed in the present invention is a new intelligent machine tool machining system. The composition of the system comprises: a same-source measurement positioning system, which comprises a same-source measurement receiving terminal device, a workpiece platform measurement feed source sensor, a spatial position measurement sensing feed source sensor and a same-source measurement receiving terminal device; machine tool self-checking, during which a full-dimensional information virtual digital machine tool is generated



ver más...

Optical tactile sensor

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY [US]
An optical tactile sensing method is provided distinguishing having an optical tactile sensor and performing shape reconstruction and force measurement. The optical tactile sensor has an elastomeric hemisphere. A single camera captures the illumination of the entire reflective inner surface of the elastomeric hemisphere in a single input image. Shape reconstruction for a novel shape is performed while in contact with the hemisphere. Image pixels of a single sensor input image are inputted to a trained neural network, which outputs shape characteristics of the contact of the novel shape

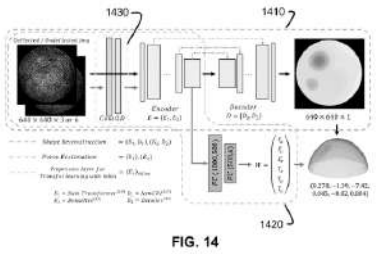


FIG. 14

ver más...

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PPG and ECG sensors for smart glasses

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: META PLATFORMS TECHNOLOGIES, LLC [US]
A smart glass including photoplethysmography and electrocardiogram sensors to determine a health condition of the user is provided. The smart glass includes a frame for holding two eyepieces, the frame having two nose pads to rest on a user's nose, and two arms to rest on two user's ears, a sensor mounted on at least one of the nose pads or the arms, and configured to collect an optical signal from a user's blood vessel, and a processor configured to obtain a waveform from the optical signal or the electrical signal, and to determine a cardiovascular parameter based on the waveform.

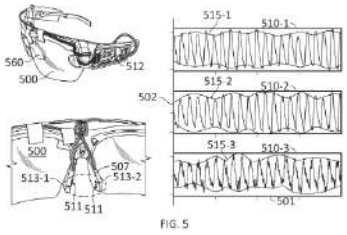


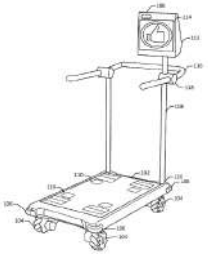
FIG. 5

ver más...

Robotic cart

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: ROBUST AI, INC. [US]
This application describes systems, devices, computer readable media, and methods for the function and operation of robotic carts. A robotic cart may include a base component configured for the receipt of a payload, a battery unit, and a mobility apparatus. The robotic cart may include a handlebar component coupled with the base component.



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Semantic recognition method and apparatus and electronic device

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

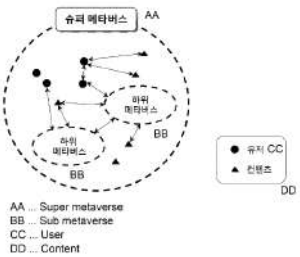
Solicitante: QINGDAO HAIER TECHNOLOGY CO., LTD. [CN]/
A semantic recognition method and apparatus and an electronic device. The method comprises: acquiring a target statement (S301); when it is determined that target words to be subjected to semantic disambiguation exist in the target statement, determining whether semantic indication words corresponding to the target words exist in the target statement or not (S303), the semantic indication words being used for determining the semantics of the target words

ver más...

Super metaverse operating system

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: CHUNGBUK NATIONAL UNIVERSITY INDUSTRY-ACADEMIC COOPERATION FOUNDATION [KR]
The present invention relates to a super metaverse operating system and, particularly, to a super metaverse operating system for operating a super metaverse including one or more sub metaverses. The super metaverse operating system according to the present invention enables integrated management of various metaverses.



ver más...

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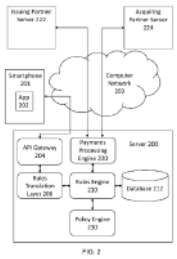
System and method for application of smart rules to data transactions

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: CURVE UK LIMITED [GB]
çA computer-implemented method of exchanging data is provided. Before a transaction, the transaction including exchange of data: associating a plurality of funding sources with an account; defining one or more rules, each corresponding to a condition and a specified funding source from the plurality; assigning a priority to each rule; and storing rules and priorities associated with the account. At a time of a transaction: receiving data describing the transaction; determining if the transaction satisfies any condition of the rules, the funding source from the satisfied rule being the determined funding source unless more than one rule has a satisfied condition.

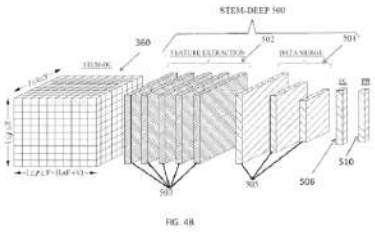


ver más...

System and method for identifying a person in a video

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: RAMOT AT TEL-AVIV UNIVERSITY LTD. [IL]
Systems, methods, and computer readable media for identifying a person in a video are disclosed. Systems, methods, devices, and non-transitory computer readable media may include at least one processor that may be configured to generate a spatiotemporal emotion data compendium (STEM-DC) from the video and to process the STEM-DC using a deep fully adaptive graph convolutional network (FAGC) to determine a first person representation vector that represents the person in the video.



ver más...

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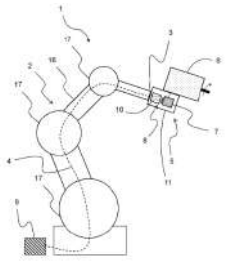
System comprising an industrial robot and an end effector with power tool and charger

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: ATLAS COPCO INDUSTRIAL TECHNIQUE AB [SE]
A system (1) comprising: an industrial robot (2) comprising a robot arm end portion (3) and a power supply circuit (4) arranged to supply current to the robot arm end portion (3), and an end effector (5) comprising a power tool (6) and an accumulator module (7) (such as a battery) arranged to power operation 5of the power tool (6), the end effector (5) being attached to the robot arm end portion



ver más...

Systems and methods of providing enhanced contextual intelligent information

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: WALMART APOLLO, LLC [US]
Some embodiments provide systems to determine contextual information comprising: an intent mining system that receive inquiry content that does not include personal identification information (PII) and is configured to determine an estimated intent information being sought by an intended recipient, identify a mapping to a sub-set of supplemental keywords corresponding to the intent information; and identify historic inquiries associated with actual historic product purchases relevant to the inquiry content and supplemental keywords, and obtain a listing of products associated with the inquiry content; a product association system that identifies a set of multiple products that each have a purchase threshold relationship with one or more products from the determined listing of products, and generate an enhanced listing of products

ver más...

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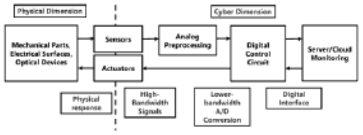
Time series prediction and classification using silicon photonic recurrent neural network

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: NEC LABORATORIES AMERICA, INC. [US]
A photonics-assisted platform for time series prediction and classification that performs signal processing directly after the signal acquisition before any analog-to-digital conversion by using a hardware neural network with recurrent connections, implemented in a silicon photonic chip. This neural network recurrency can be implemented in silicon photonics with a much lower latency than state-of-the-art electronic systems. The recurrent neural network can detect temporal correlations and extract features from the time series signal

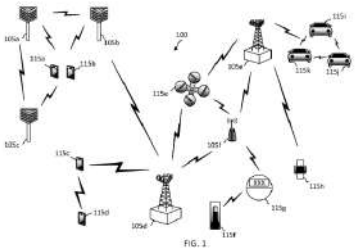


ver más...

Training of reconfigurable intelligent surfaces through 1 port comb-n reference signals

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: QUALCOMM INCORPORATED [US]
Schemes and mechanisms for selecting and training reflective devices are provided. In a network with reconfigurable intelligent surfaces (RISs) (or other configurable reflective devices), multiple RISs may be selected and trained at the same time using a single comb-N sounding reference signal transmitted by a user equipment (UE). The reference signal may be reflected by each RIS with a different frequency shift applied by each RIS.



ver más...

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Vehicle control based on cascaded controllers with configurable bandwidth

Publicada en PATENTSCOPE Industria intelligente, 08/06/2023.

Solicitante: VOLVO AUTONOMOUS SOLUTIONS AB [SE]
A control system (130, 140, 301) for motion management of a heavy-duty vehicle (100), the control system comprising an upper-level control system (302) and a lower-level control system (303), where the upper-level control system (302) is arranged to obtain a desired motion behavior by the vehicle (100) and to transmit one or more control signals adapted for control of at least one motion support device, MSD, to the lower-level control system (303) in dependence of the desired motion behavior by the vehicle (100), wherein the one or more control signals transmitted from the upper-level control system (302) to the lower-level control system

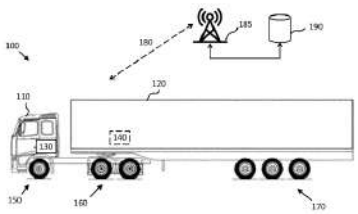


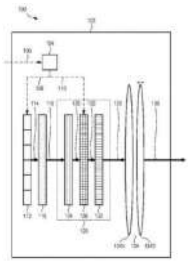
FIG. 1

ver más...

Projector with local dimming

Publicada en Espacenet_Power Electronic, 01/06/2023.

Solicitante: LUMILEDS [US]
A projection system can include a housing. A controller can receive a video signal and, in response to the video signal, produce a light-emitting diode (LED) array-controlling signal and a modulation panel-controlling signal. An LED array disposed in the housing can include LEDs that are configured to produce LED light



ver más...

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Skin-like stretchable neuromorphic devices for artificial intelligence applications

Publicada en Espacenet_Power Electronic, 01/06/2023.

Solicitante: UNIV CHICAGO[US]
This disclosure generally relates to neuromorphic computing devices, systems, and platforms for artificial intelligence applications. Specifically, the disclosed platform is stretchable, and devices fabricated based on such a platform can thus be configured to adhere to human skin conformably even in areas of the skin that frequently stretch, bend, or otherwise deform.

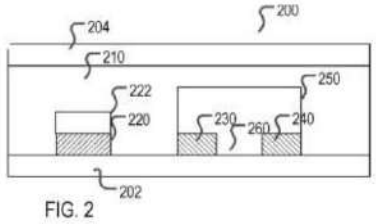


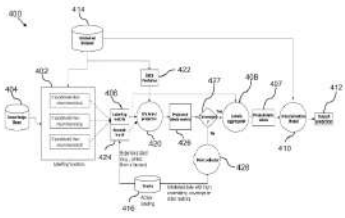
FIG. 2

ver más...

Active learning system using generative weak supervision for knowledge extraction

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: NEC LABORATORIES EUROPE GMBH [DE]
Disclosed is an active learning system using generative weak supervision for knowledge extraction. In an embodiment, the invention relates to a computer- implemented machine learning, ML, method, the method comprising: a) computing a labeling matrix by applying a set of labeling functions, LFs, to data points of an unlabeled dataset; b) generating a projected labels matrix by computing, based on the labeling matrix, LFs labels projections to undefined labels; c) estimating, for each labeled data point, an uncertainty of the label based on the LFs output and the projected labels



ver más...

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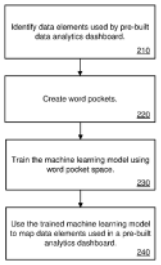
Augmented query validation and realization

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: SAP SE
Technologies are described for mapping data elements for pre-built analytics dashboards. For example, a list of data elements that are present in a target landscape can be obtained and compared to data elements that are used by a pre-built analytics dashboard to determine a first category of data elements that are present in the target landscape but not in the pre-built analytics dashboard and a second category of data elements that are present in the pre-built analytics dashboard but not in the target landscape.



ver más...

Fused acoustic and text encoding for multimodal bilingual pretraining and speech translation

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: Baidu USA, LLC
Representation learning for text and speech has improved many language-related tasks. However, existing methods only learn from one input modality, while a unified representation for both speech and text is needed for tasks such as end-to-end speech translation. Consequently, these methods cannot exploit various large-scale text and speech data and their performance is limited by the scarcity of parallel speech translation data. To address these problems, embodiments of a fused acoustic and text masked language model (FAT-MLM) are disclosed.

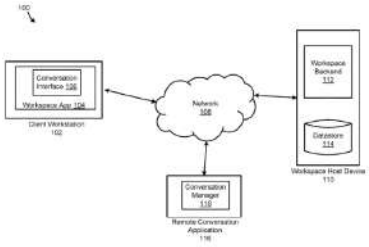
ver más...

Volver al índice

Intelligent invitation system

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: Citrix Systems, Inc.



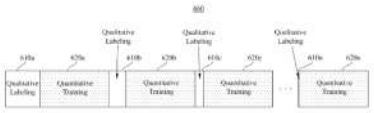
A computing device for providing an intelligent invitation system for network-based conversation applications is provided. The computing device includes a computer readable medium and at least one processor operably coupled to the computer readable medium. The at least one processor can be configured to receive conversation information related to a conversation between two or more conversation participants. The processor can analyze the conversation information to identify one or more additional users to invite to the conversation by, for example, performing a speech to text conversion of the conversation information and processing the text for one or more specific keywords that can be used to identify the one or more additional users.

ver más...

Interactive qualitative-quantitative live labeling for deep learning artificial intelligence

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

SOlicitante: BLUWARE, INC. [US]



A live model of a deep learning algorithm may be used to generate predictions of features of interest in an instance of training data. If the predictions correspond to actual features of interest, the predictions may be converted to qualitative labels, the instance may be designated as being acceptably labeled, and the live model may be trained on all instances of training data designated as acceptably labeled to update the live model. If the predictions do not correspond, a repetitive process of applying qualitative labels to features of interest in the instance of training data

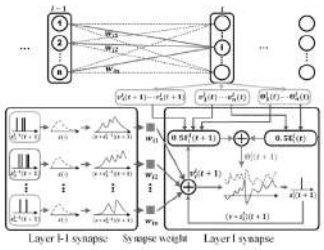
ver más...

Volver al índice

Method for obstacle avoidance in degraded environments of robots based on intrinsic plasticity of snn

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: DALIAN UNIVERSITY OF TECHNOLOGY
A method for obstacle avoidance in degraded environments of robots based on intrinsic plasticity of an SNN is disclosed. A decision network in a synaptic autonomous learning module takes lidar data, distance from a target point and velocity at a previous moment as state input, and outputs the velocity of left and right wheels of the robot through the autonomous adjustment of the dynamic energy-time threshold, so as to carry out autonomous perception and decision making.



ver más...

Methods and apparatuses for software vulnerability detection

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: HUAWEI TECHNOLOGIES CO.,LTD. [CN]
There is provided a method and apparatus for early detection of the dangerous issue reports that may leak software vulnerability information before the vulnerability is properly disclosed. Based on Artificial Intelligence or deep learning, embodiments can automatically identify dangerous issue reports at the time they are reported.

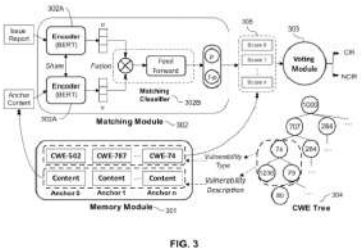


FIG. 3

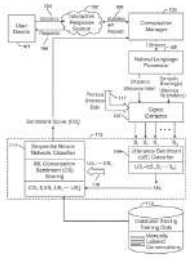
ver más...

Volver al índice

Multi-tier rule and ai processing for high-speed conversation scoring

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: Bank of America Corporation
Apparatus and methods for leveraging machine learning and artificial intelligence to assess a sentiment of an utterance expressed by a user during an interaction between an interactive response system and the user is provided. The methods may include a natural language processor processing the utterance to output an utterance intent.

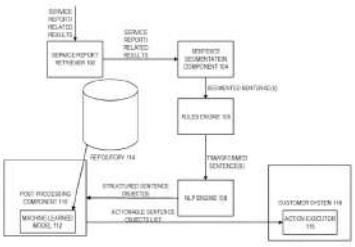


ver más...

Natural language processing machine learning to convert service recommendations to actionable objects

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: SAP SE
In an example embodiment, a natural language processing (NLP) machine learning and rules-based text extraction and analysis approach is used to convert a textual service recommendation document into customer-tailored actions considering the specific context-based executable script. This creates end-to-end automation in implementing suggestions provided in textual documents.



ver más...

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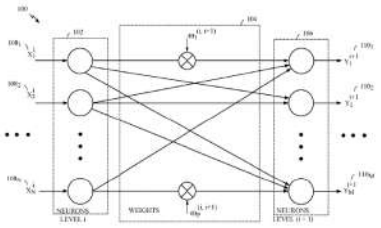
Neural-network-based power management for neural network loads

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

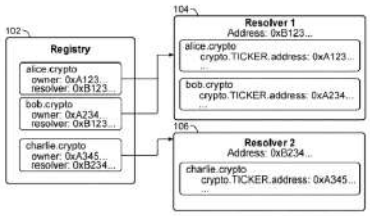


Solicitante: QUALCOMM Incorporated
Methods and apparatus for supplying power to a dynamic load, such as a neural network circuit. One example power supply circuit generally includes a voltage regulator circuit and a distribution circuit coupled to one or more outputs of the voltage regulator circuit. The distribution circuit is configured to output different amounts of current based on changes in the dynamic load. For certain aspects, the dynamic load includes a neural network circuit having a plurality of segments. In this case, the distribution circuit may be configured to output the different amounts of current based on which segment in the plurality of segments of the neural network circuit is active.

ver más...

Resolving blockchain domains

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.



Solicitante: Unstoppable Domains Inc.
A request to resolve at least a name of a domain of a name identifier is received. It is automatically determined that the name of the domain is to be resolved using a blockchain. The identifier of the non-fungible token is used to send a request to a smart contract associated with the blockchain to obtain one or more resolution records for the domain. The blockchain stores the non-fungible token associating the domain to an account address of an owner of the domain. The one or more resolution records of the domain are received. The received one or more resolution records are used to resolve at least the name of the domain.

ver más...

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Robotic training apparatus

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitantes: KAWAR, Kais Jeries [JO]/[JO]; ALMASRI, Zaid [JO]/[JO]
A robotic training apparatus for martial arts and combat sports that is of a dimension like a punching bag and can be hung or mounted on a floor. The apparatus includes a frame, an upper revolving member and a lower revolving member mounted to the frame, wherein the two members can revolve independently of each other along a vertical axis.

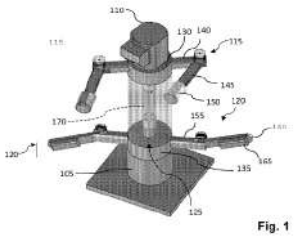

Fig. 1

ver más...

Smart glasses and image distance adjustment method therefor

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: GOERTEK INC. [CN]
A pair of smart glasses and an image distance adjustment method therefor. The smart glasses comprise: a binocular display module (100), a binocular module holder (200), a visibility detection module (300), an image distance adjustment module (400), an image source module (500), and a display control module; the image distance adjustment module (400) maintains the image source module (500) above the binocular display module (100); the binocular display module (100) is arranged on the binocular module holder (200), and the binocular display module (100) and the image source module (500) constitute a display system of the smart glasses

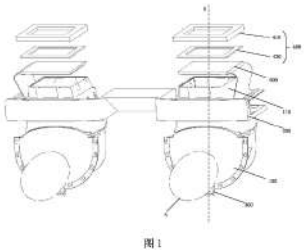
图 1

ver más...

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System and method for super-resolution of magnetic resonance images using slice-profile-transformation and neural networks

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

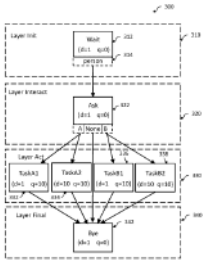
Solicitante: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US]
A system for super-resolution of magnetic resonance (MR) images includes an input for receiving a two-dimensional (2D) multi-slice MR dataset of a subject, a pre-processing module coupled to the input and configured to generate a convolved input from the received 2D multi-slice MR dataset by applying slice-profile convolution to the received 2D multi-slice MR dataset, a through plane super resolution neural network coupled to the pre-processing module and configured to generate a through-plane super-resolution imaging volume based on the convolved input, and a post-processing module coupled to the through plane super resolution neural network and configured to generate a three-dimensional (3D) isotropic super resolution imaging volume by applying slice-profile deconvolution.

ver más...

Systems and methods for generation of action strategies by an autonomous system

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitantes: UNIVERSITÉ DE CAEN NORMANDIE; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS); ECOLE NATIONALE SUPÉRIEURE D'INGÉNIEURS DE CAEN
Systems and methods for generating an action strategy to be executed by an autonomous system are disclosed. The action strategy comprises a series of actions to be performed by the autonomous system to accomplish a corresponding active objective in response to detecting an abnormal event, the abnormal events occurring or having occurred in an environment where the autonomous system is configured to operate. The method comprises accessing a first database populated with event descriptions corresponding to abnormal events and accessing a second database populated with candidate objectives.



ver más...

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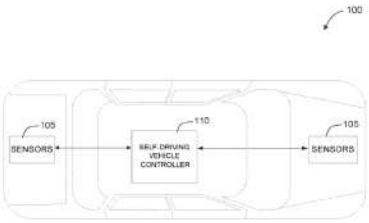
Systems and methods for maintaining a self-driving vehicle

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: State Farm Mutual Automobile Insurance Company
A computer-based method for maintaining an autonomous or self-driving vehicle is provided. The method is implemented using a vehicle controlling ("VC") computer device installed on the vehicle. The method may include determining that a maintenance operation is required for the self-driving vehicle, retrieving an operator schedule for an operator of the self-driving vehicle, retrieving a facility schedule for a facility, determining a time for performing the maintenance operation based upon the operator schedule, the facility schedule, and an amount of time required to (i) complete the maintenance operation



ver más...

Using a neural network scene representation for mapping

Publicada en PATENTSCOPE Industria intelligente, 01/06/2023.

Solicitante: XYZ REALITY LIMITED [GB]
Certain examples described herein relate to a mapping system. An example mapping system has a differentiable mapping engine to receive image data comprising a sequence of images captured using one or more camera devices of an object as it navigates an environment and a neural network scene representation comprising a neural network architecture trained to map input coordinate tensors indicating at least a point location in three-dimensional space to scene feature tensors having a dimensionality greater than the input tensors.

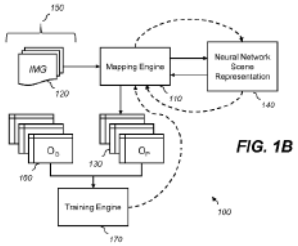


FIG. 1B

ver más...

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Method and apparatus for pre-training a language model, storage medium and program product

Publicada en Patentes AI patentscope, 03/05/2023.

SOlicitante: BEIJING BAIDU NETCOM SCI & TECH CO LTD
The present disclosure provides a method and apparatus for pre-training a model, a device, a storage medium, and a program product, and relates to the technical field of artificial intelligence, in particular to the technical fields of natural language processing and deep learning. An embodiment of the method includes: acquiring a sample natural language text; generating N types of prompt words based on the sample natural language text, where N is a positive integer

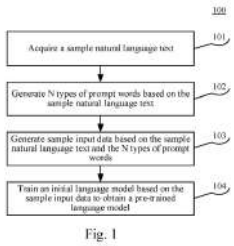


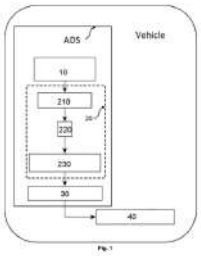
Fig. 1

ver más...

Method and system for improving performance of camera-based detection algorithm

Publicada en Patentscope_Domótica, 03/05/2023.

Solicitante: CONTINENTAL AUTONOMOUS MOBILITY GERMANY GMBH
The invention relates to a system and a method for improving a detection algorithm of a driving assistance system. The system according to invention comprises at least one imaging device (10) for detecting objects in the surrounding of the vehicle



ver más...

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Systems and methods for HVAC equipment predictive maintenance using machine learning

Publicada en Patentscope_Domótica, 03/05/2023.

Solicitante: SIEMENS INDUSTRY INC

Methods for predictive maintenance with using machine learning in a building automation system and corresponding systems and computer-readable mediums. A method includes receiving device event data corresponding to a device and executing an inference engine to determine root cause fault data corresponding to the device event data . The method includes executing a predictive maintenance engine

ver más...

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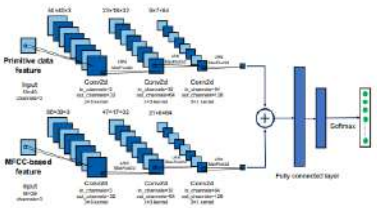
PUBLICACIONES CIENTÍFICAS

VibHead: An Authentication Scheme for Smart Headsets through Vibration

Publicada en https://arxiv.org, 29/06/2023.

Recent years have witnessed the fast penetration of Virtual Reality (VR) and Augmented Reality (AR) systems into our daily life, the security and privacy issues of the VR/AR applications have been attracting considerable attention.

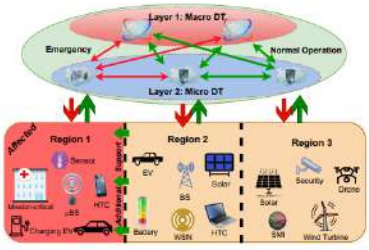


ver más...

Digital Twinning in Smart Grid Networks: Interplay, Resource Allocation and Use Cases

Publicada en https://arxiv.org, 26/06/2023.

Motivated by climate change, increasing industrialization and energy reliability concerns, the smart grid is set to revolutionize traditional power systems.



ver más...

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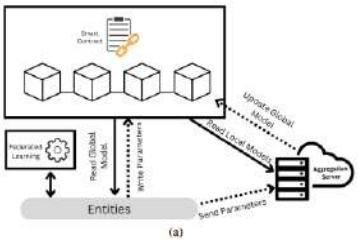
Blockchain-based Federated Learning for Decentralized Energy Management Systems

Publicada en https://arxiv.org/, 23/06/2023.

The Internet of Energy (IoE) is a distributed paradigm that leverages smart networks and distributed system technologies to enable decentralized energy systems. In contrast to the traditional centralized energy systems, distributed Energy Internet systems comprise multiple components and communication requirements that demand innovative technologies for decentralization, reliability, efficiency, and security.



ver más...

RoboCat: A Self-Improving Foundation Agent for Robotic Manipulation

Publicada en https://arxiv.org, 23/06/2023.

The ability to leverage heterogeneous robotic experience from ifferent robots and tasks to quickly master novel skills and bodiments has the potential to ransform robot learning. Inspired by recent advances in foundation models or vision and language, we propose a foundation agent for robotic manipulation.

ver más...

Volver al índice

Smart Environment for Adaptive Learning of Cybersecurity Skills

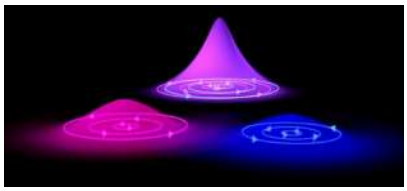
Publicada en https://arxiv.org, 03/06/2023.

Hands-on computing education requires a realistic learning environment that enables students to gain and deepen their skills. Available learning environments, including virtual and physical labs, provide students with real-world computer systems but rarely adapt the learning environment to individual students of various proficiency and background. We designed a unique and novel smart environment for adaptive training of cybersecurity skills.

ver más...

Superconducting vortices carrying a temperature-dependent fraction of the flux quantum

Publicada en https://www.science.org/, 01/06/2023.



Superconductors can expel weak external magnetic fields. However, when the field becomes sufficiently strong, it can penetrate the superconductor, creating vortices that each correspond to a quantized magnetic flux. For a multiband superconductor, the picture is more complicated because the vortices can also carry a fraction of the unit flux. Iguchi et al. used superconducting quantum interference device magnetometry to observe signatures of such fractional flux quantum vortices in the material Ba1–xKxFe2As2. The results may find practical use in developing superconducting devices. —Jelena Stajic

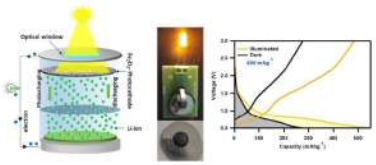
ver más...

Volver al índice

Solar cells inspire Li-ion batteries

Publicada en https://techxplore.com, 08/05/2023.

Solar energy is at the forefront of the global shift toward producing sustainable energy sources and addressing energy poverty. However, the intermittent nature of solar energy limits its use for applications such as IoT devices, live remote sensing and an off-grid power supply.



ver más...

TidyBot: Personalized Robot Assistance with Large Language Models

Publicada en https://arxiv.org, 08/05/2023.

For a robot to personalize physical assistance effectively, it must learn user preferences that can be generally reapplied to future scenarios. In this work, we investigate personalization of household cleanup with robots that can tidy up rooms by picking up objects and putting them away.

ver más...

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An Ontology-driven ECHONET Lite Adaptation Layer for Smart Homes

Publicada en Tecnologías Inteligentes, 03/05/2023.

ECHONET Lite is a leading protocol for controlling devices in Japan smart homes. However, it lacks interoperability with service platforms that provide ambient assisted living (AAL) services to residents which are actively researched in order to deal with the population aging. This research proposes an adaptation layer for ECHONET Lite protocol which provides the semantic interoperability based on ontology. In order to verify the proposed solution, a service gateway based on the proposed archite[...]

ver más...

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