



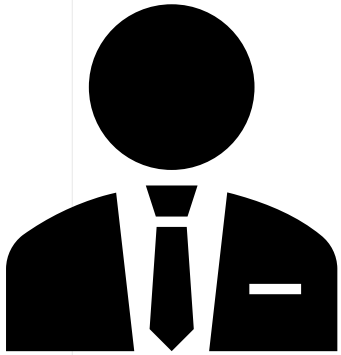
Technology Landscape For Innovation Decision Makers



Innosabi Insight

TECHNOLOGY LANDSCAPE

Need



Senior Scientist
Marketing Analyst
Innovation Manager

We track consumer needs and desires, requiring to quickly **learn** and determine which space to pursue.

Thus, why we need to **explore** new subjects several times a year.

Our objective is to **report information** by providing comprehensive overviews of technologies and industries: **forecasts**, **trends**, players and publications.

TECHNOLOGY LANDSCAPE

Everything starts with keywords related to the opportunity

The larger, the better

Big picture thinking to come up with ideas, solutions & opportunities



TECHNOLOGY LANDSCAPE

Refine your search query

Find synonyms and/or specific terms to improve your search.

Scientific articles are a great source to identify additional keywords.

Fuzzy logic, neural networks ...

Data Screening

Scientific Works

Title	Type	Publication year
Artificial Intelligence from the Point of View of Law	Journal Article	2018
<div>Abstract</div> <div>Artificial intelligence technologies are developing intensively today, including due to the development of technologies of stable neural networks and cloud computing infrastructures, fuzzy system technologies, entropy administration, swarm intelligence, evolutionary computations, and many others. etc. At the same time, the problem of almost complete absence of normative legal regulation and normative technical regulation of the foundations, conditions and features of development, functioning and activities, integration into other systems and control over the use of artifici...</div>		
Artificial Intelligence as a Technological Innovation to Accelerate Economic Development	Journal Article	2019
Striving for excellence in AI implementation: AI Maturity Model framework and preliminary research results	Journal Article	2019
Artificial Intelligence : from Research to Application ; the Upper-Rhine Artificial Intelligence Symposium (UR-AI 2019)	Journal Article	2019
[Only artificial intelligence can heal us? : Artificial intelligence in medicine as deus ex machina, grands recits nouveaux or super...	Journal Article	2019

Artificial Intelligence from the Point of View of Law

Type : Journal Article / Unknown

Publication date: 2018

Base: Doaj

Language: English

Full text link: <https://doaj.org/article/d7aaa9...>

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2

Abstract

Artificial intelligence technologies are developing intensively today, including due to the development of technologies of stable neural networks and cloud computing infrastructures, fuzzy system technologies, entropy administration, swarm intelligence, evolutionary computations, and many others. etc. At the same time, the problem of almost complete absence of normative legal regulation and normative technical regulation of the foundations, conditions and features of development, functioning and activities, integration into other systems and control over the use of artificial intelligence technologies is global today. The Article is devoted to the study of the specifics of the legal regulation of the use and development of artificial intelligence. Some approaches to the definition of artificial intelligence and the features of legal regulation of this sphere, which take place in the scientific literature, are considered and the author's definition of artificial intelligence is developed and given through the disclosure of its main features. In particular, according to the proposed definition, artificial intelligence is an artificial complex cybernetic computer-software-hardware system possessing the properties of substantivity, autonomy, and also the ability to perceive and analyze data, to self-learn. The question of positioning the artificial intelligence system as a special form of person (for example, the so-called «electronic person»), that is, granting it a certain legal personality depending on various factors and the field of application of such a system, is considered in this article. The article also notes the main possible approaches to legal support for the use and development of artificial intelligence systems, in particular, such approaches include the preemptive universal-total legal regulation and legal regulation aimed at the regulation of specific artificial intelligence systems. The main risks and uncertainties associated with artificial intelligence (and which are of great importance for the adoption of legislation in this field) have been investigated. There are drawn the conclusions about how to develop legislation on the use and development of artificial intelligence: consistently, taking into account the specifics of areas of its application, as well as balancing the interests of individuals, society and the state with regard to proper security and protection of individual rights, and interests related to the development of innovation for the benefit of the whole society.

TECHNOLOGY LANDSCAPE

Refine your search query

Develop your search query to obtain an accurate landscape of your opportunity

Big picture thinking to come up with ideas, solutions & opportunities

Enter concept (biomarker, autonomous vehicle,...) or organisation (Facebook, Samsung,...) SMART

artificial intelligence **Add suggestions 8** machine learning neural network

- + intelligent
- + expert system
- + knowledge representation
- + learning algorithm
- + ai technology
- + computational intelligence
- + domain knowledge
- + artificial neural network

Enter concept (biomarker, autonomous vehicle,...) or organisation (Facebook, Samsung,...) SMART

artificial intelligence **Add suggestions 8** machine learning neural network

Concepts

- deep learning
- deep learning model
- deep learning network

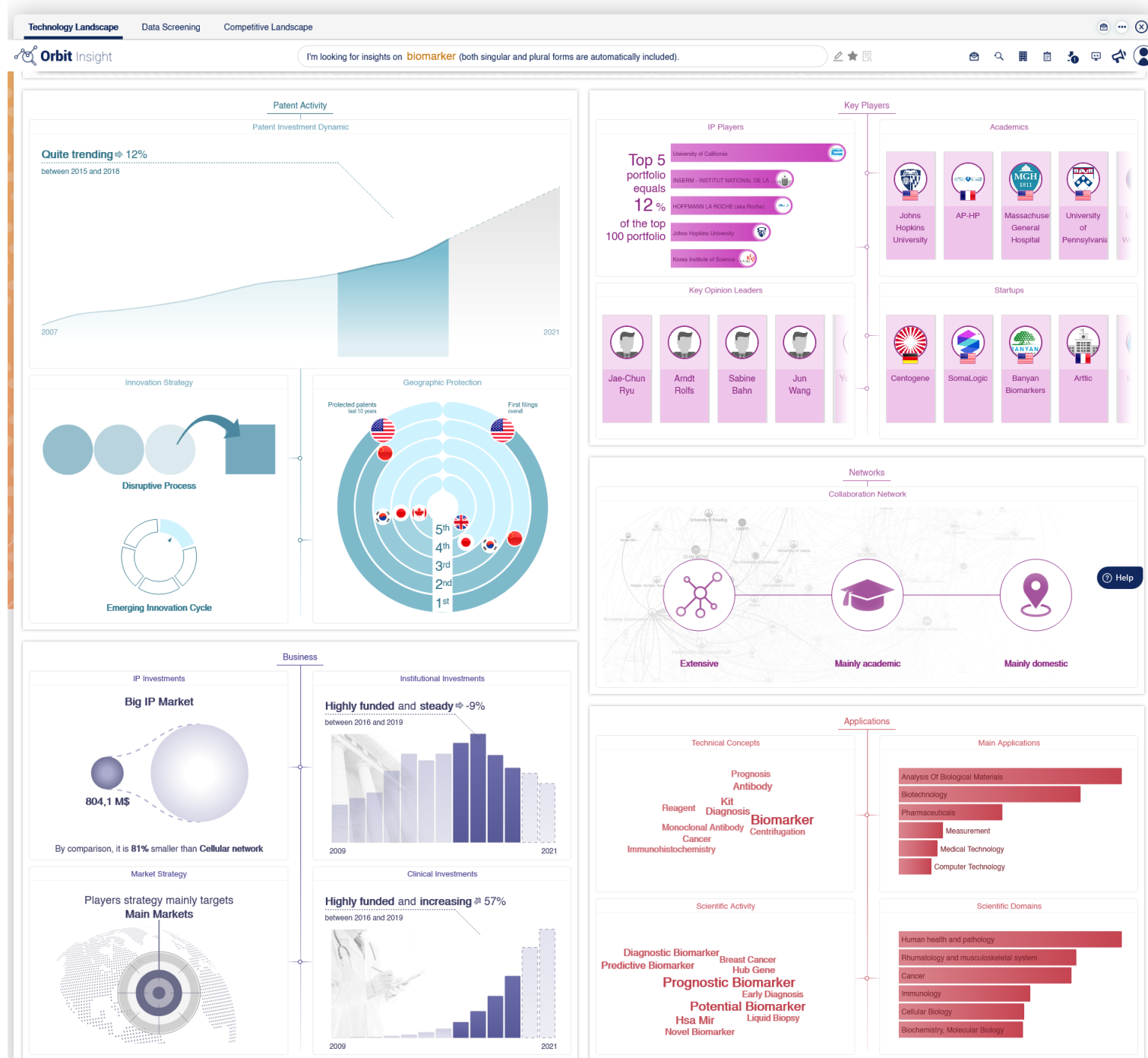
artificial intelligence **Add suggestions 8** 1 more... neural network deep learning random forest

TECHNOLOGY LANDSCAPE

Explore

Global trends are outlined using the **Technology Landscape**:

- **Volume:** With 189k patent families and 635k articles, we are dealing with a huge domain
- **Dynamics:** Activity is booming for patent protection and R&D. The amount of investment is important.
- **Technologies:** Neural network & Machine Learning are the mainstream technics.
- **Players:** Chinese entities & US big techs are leading the domain.

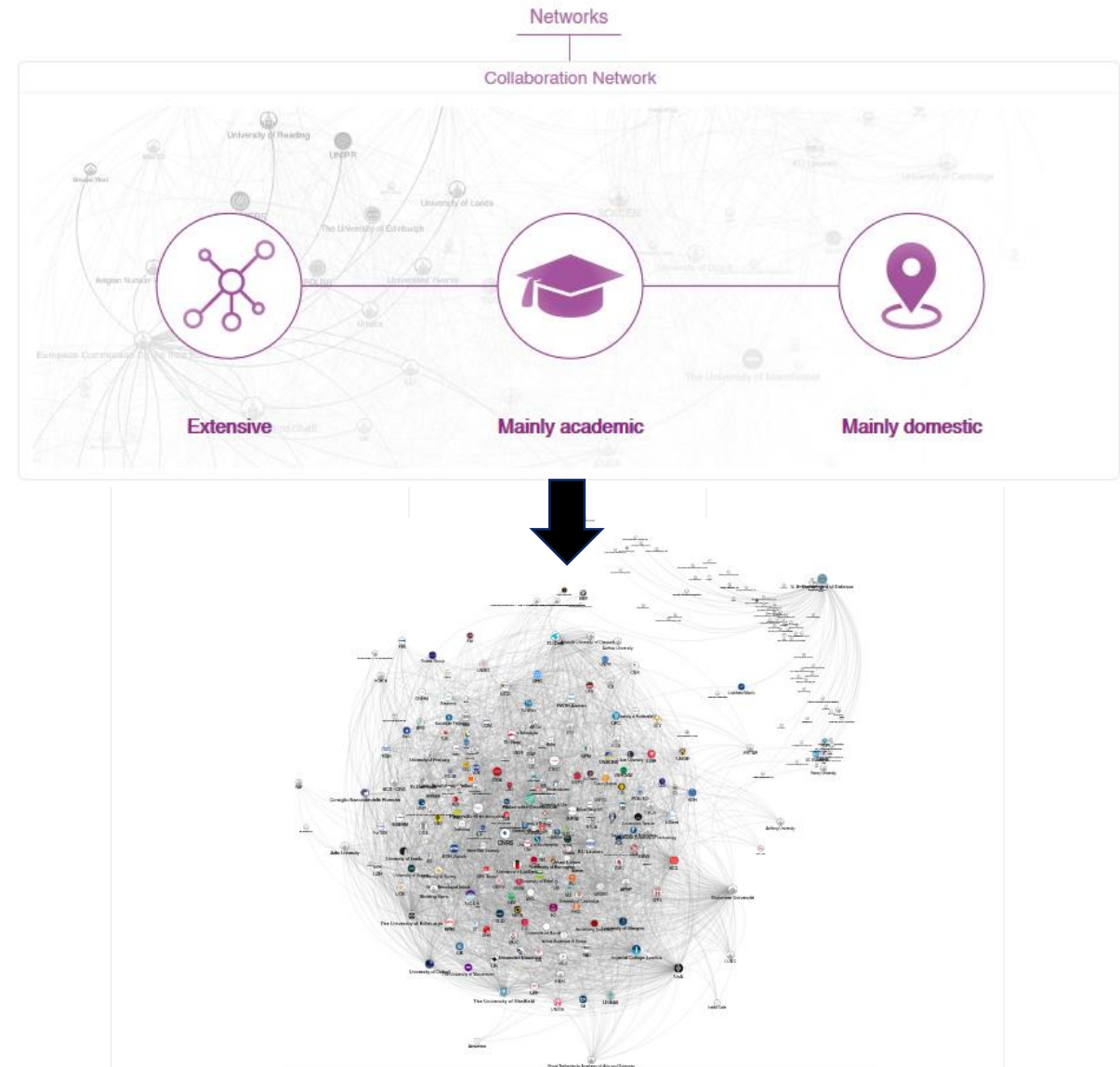


TECHNOLOGY LANDSCAPE

Explore

The collaboration intensity and the type of network (academic, geographic...) help to assess if the domain is willing to pursue open innovation projects and if collaboration is an avenue to access skills and knowledge.

In AI, collaboration is mandatory between people owning the technology and companies ownership of the use cases. No borders exist and entities everywhere are collaborating together.



TECHNOLOGY LANDSCAPE

Forecast

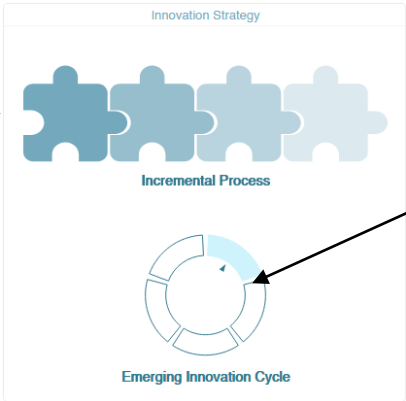
The difference between the volume of patents and the volume of articles – just like the number of institutional R&D projects - informs about the maturity of the topic.



Innovation metrics visually represent the way innovation is developed on a technology.

The greater the dispersion of IPC/CPC subclasses of the cited patents, the higher the disruption

AI is in incremental innovation process



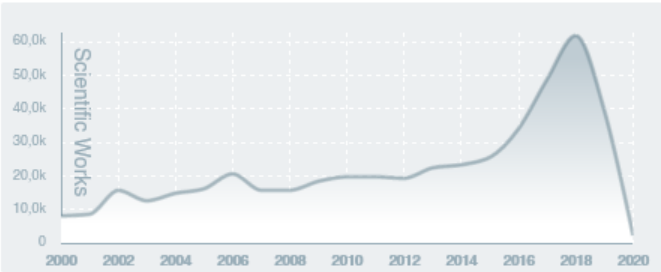
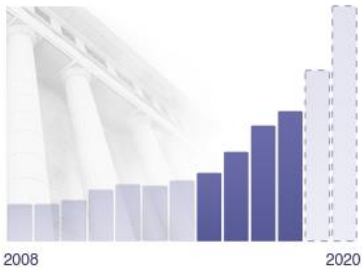
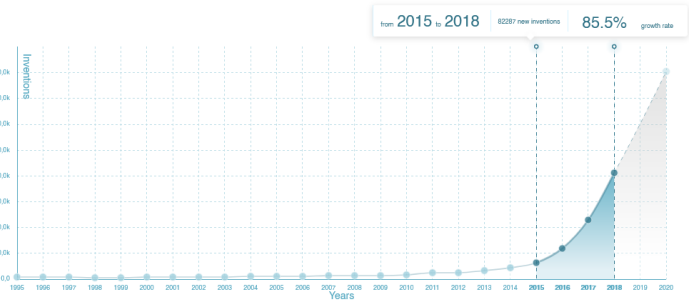
The higher the weight of the main patent holders, the more mature the market

AI is still an emerging technology with a high dispersion of the rights

Dynamics analyses forecast the future trends

Highly funded and increasing ↗ 24%
between 2015 and 2018

innosabi empowering what

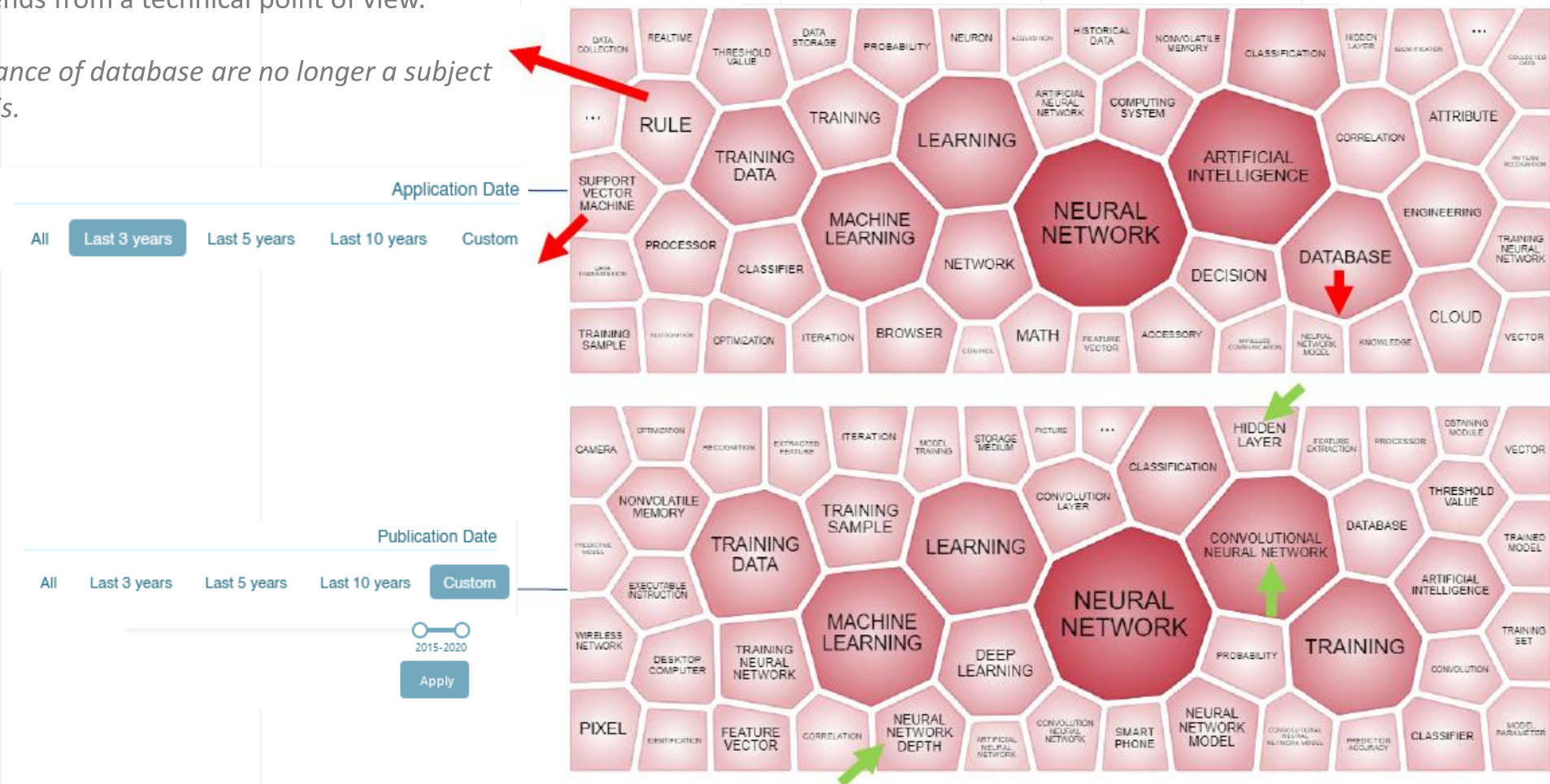


TECHNOLOGY LANDSCAPE

Learn

Technologies and solutions analyses overtime help to define the bets and new trends from a technical point of view.

SVM and the importance of database are no longer a subject while deep learning is.



TECHNOLOGY LANDSCAPE

Learn

New products and startups are flourishing everyday and reviewing the unstructured data of the web allows to identify description or specification of products and services.

Aurora-AI is a young startup without patents or scientific work. Specialized in Deep learning for aeronautics,it is still an important player to be considered.

 2531403 web contents




Web content type

- ☐ Archive
- ☐ Excel Document
- ☐ HTML Page
- ☐ Office Document
- ☐ OpenDocument Sheet
- ☐ OpenDocument Text
- ☒ PDF Document
- ☒ PowerPoint Document
- ☐ RSS Feed
- ☐ Rich Text Format
- ☐ Text
- ☐ Word Document
- ☐ XML Document



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Enabling Embedded Vision Neural Network DSPs	pdf	https://ip.cadence.com/uploads/1208/TIP_WP_8611_Vision_C5_FINAL...	Cosmic Circuits
Enabling Embedded Vision Neural Network DSPs	pdf	https://ip.cadence.com/uploads/1208/TIP_WP_8611_Vision_C5_FINAL...	Cadence Design Systems
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PowerPoint Presentation	pdf	http://aurora-ai.com/wp-content/uploads/2018/03/Vacancy-AI-Research...	Aurora-AI
http://ml.informatik.uni-freiburg.de/papers/16-AUTOML-AutoNet.pdf	pdf	http://ml.informatik.uni-freiburg.de/papers/16-AUTOML-AutoNet.pdf	Institut für Informatik
Deep Learning for Cybersecurity Use Cases - White Paper	pdf	http://technicaCorp.com/wp-content/uploads/2016/11/WP_Deep-Learnin...	Technica Corporation
Data Analysis and Machine Learning Lecture 13: From Artificial Intelligence to Machine L...	pdf	http://www.thalesians.com/finance/images/Lecture13.pdf	Thalesians

**AURORA-AI**
POWERED BY DEEP LEARNING

VACANCY: AI RESEARCH ENGINEER

Company Background

Aurora creates Artificial Intelligence solutions for the Air Industry and other sectors. We are a UK leader in the provision of Deep Learning technology and face recognition solutions. Our state-of-the-art applications have been delivered to over 1000 sites in the UK and globally.

At the heart of Aurora's portfolio is our Artificial Intelligence platform. Recent advancements in AI techniques (particularly Deep Learning) have accelerated improvements in performance and this now forms the main focus of our research and development efforts. We pride ourselves in the ability to take theory and innovation and apply it to challenging problems in the real world.

The Role

We have a vacancy for an AI Research Engineer to assist in the development of AI Deep Learning systems within our existing team of talented data scientists, research engineers and AI developers.

You will have the opportunity to work with state-of-the-art Deep Learning technology to solve challenging problems in the delivery of AI solutions. You will work as part of the AI core team.

This involves analysis and processing of large quantities of data in preparation for training a Deep Neural Network to solve the given task. This is followed by the monitoring of Deep Learning training cycles, before ultimately deploying a trained Neural Network into a complete software pipeline, either as part of an SDK or end-user application for use in customer systems.

This role will require working as part of a team in a collaborative effort to solve the given challenges. The current AI group is a multi-national, multi-disciplinary team of nine PhDs, MScs and experienced software engineers that work in a fast-paced environment focused on real world systems delivery.

You will be given the opportunity to acquire new skills, through training and research of the latest techniques, with rapid transfer to challenging problems for our broad range of customers.

LOCATION: HIGHAM FERRIES, NORTHAMPTONSHIRE
SALARY: NEGOTIABLE DEPENDING ON SKILLS AND LEVEL OF EXPERIENCE
ADDITIONAL BENEFITS: HEALTH CARE, PENSION CONTRIBUTION, HOME AND OFFICE WORKING

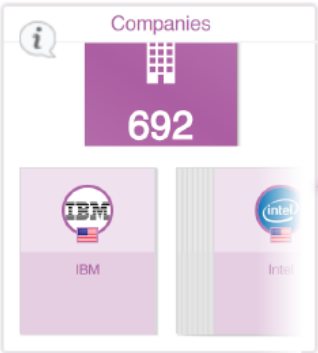
TECHNOLOGY LANDSCAPE

Learn

The best companies are the most impactful ones on the ecosystem and are ranked according to our algorithms. This ranking helps to get an objective third-party opinion and focus on some players for rational reasons.

For patents, the volume of production for the Chinese universities position them as dominant. However, when other innovation components are considered, we see a large domination of the US bigtechs, especially IBM and Google. Chipmakers are not far behind, like Intel and Samsung.

Data Screening



Name	Country
IBM	United..
Intel	United..
Alphabet	United..
Samsung Electronics	South..
Siemens	Germany
State Grid Corporation of China	China
Adobe Systems	United..
Microsoft	United..
Thales Group	France
Koninklijke Philips	Netherl..
DFKI	Germany
Baidu	China

Technology Landscape

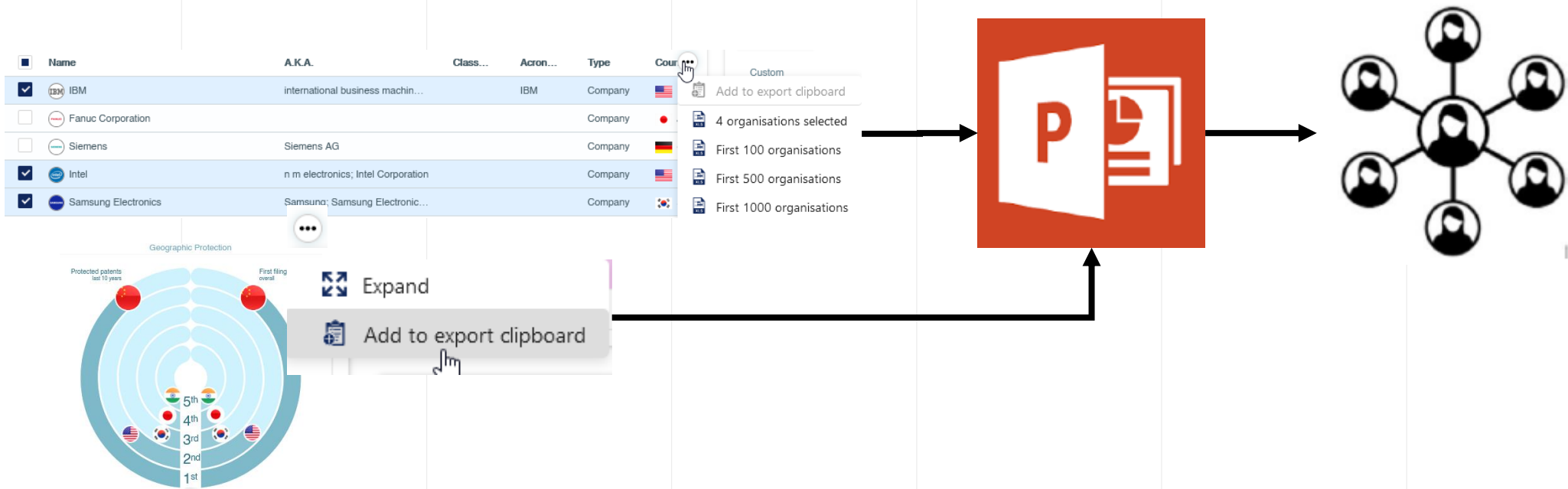


Name	Country
IBM	United..
Microsoft Technology Licensing Llc	United..
State Grid Corporation of China	China
Zhejiang University	China
Samsung Electronics	South..
PINGAN TECHNOLOGY	
Beijing University of Technology	China
Tsinghua University	China
University of Electronic Science and Technology of China	China
South China University of Technology	China
Chongqing University	China

TECHNOLOGY LANDSCAPE

Report

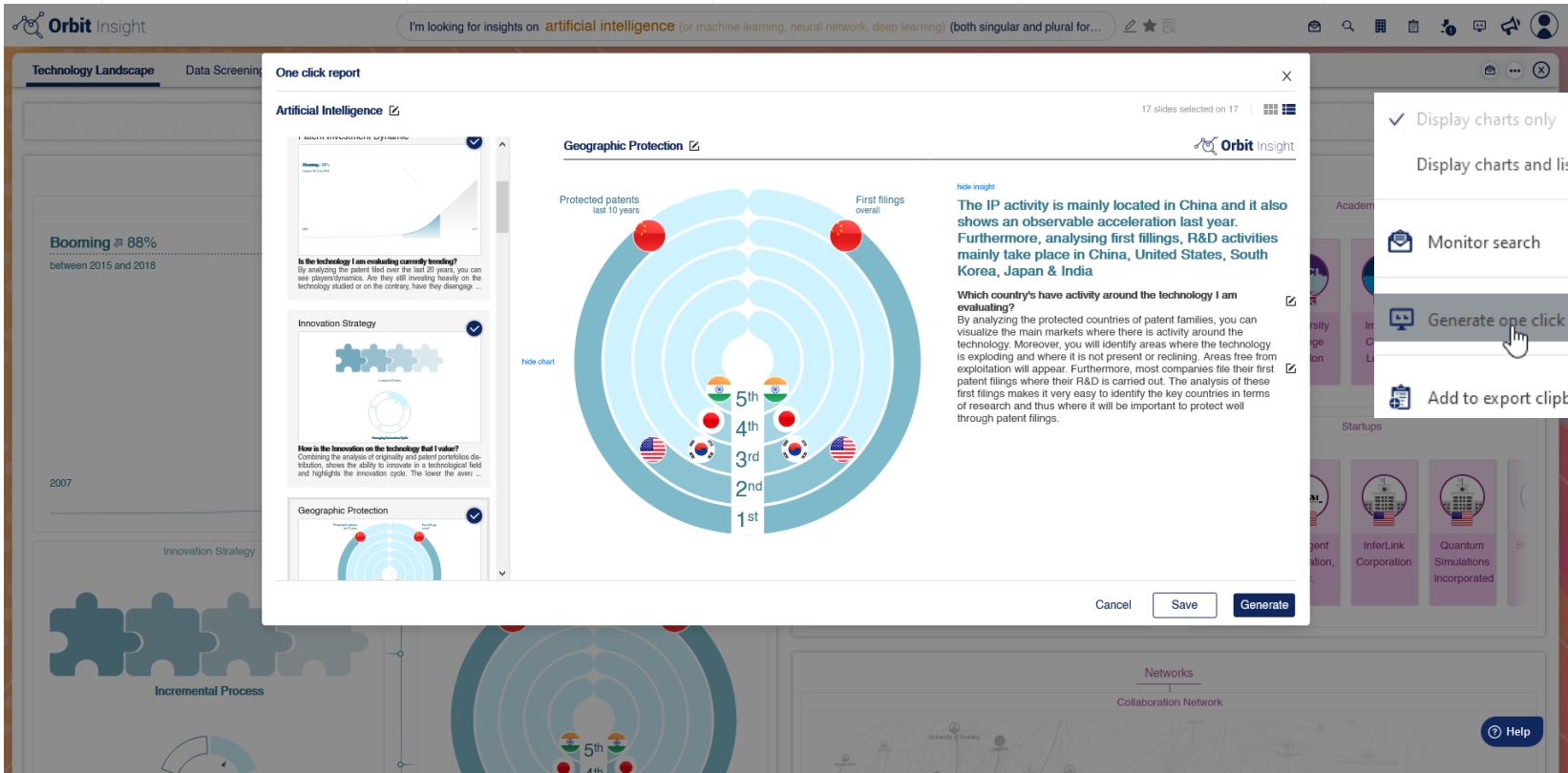
All charts and data can be exported as a picture or an Excel spreadsheet : It means data can be manipulated and reports can be shared with management or team mates in the company.



TECHNOLOGY LANDSCAPE

Report

Generate attractive and comprehensive reports



TECHNOLOGY LANDSCAPE

Watch your Ecosystem

What is the latest news? The latest funding or M&A? The last patents filed or collaborations that are taking place?... Get **competitive insights** automatically and receive weekly or monthly directly in your mailbox

The image shows the Orbit Insight dashboard and a detailed view of the Insight Feed. The dashboard on the left has an orange background with a grid of dots. It includes a search bar with the placeholder text "Enter concept (biomarker, autonomous vehicle,...) or organisation (Facebook, Samsung,...)". Below the search bar are two sections: "Last searches" and "Last news". The "Last searches" section lists: "insights on **lidar** (or laser scanner, photoelectri,...)", "insights on **MRNA vaccine** (or Messenger ...)", "insights on **artificial intelligence** (or machi,...)", "insights on **artificial intelligence** (or machi,...)", and "insights on **biomarker**". The "Last news" section lists: "DefinedCrowd CEO Daniela Braga on the future of AI - Lisa Stiller - 13 Mar 2021", "Interview with Buck Jordan, Miso Robotics CEO - socattech.com - Benjamin F. Kuo - 8 Mar 2021", "Deloitte to launch AI Institute initiative in Canada - Isabelle Kirkwood - 3 Mar 2021", "Peak AI nabs \$21M for a platform to help non-derivatives - Ingrid Lunden - 17 Feb 2021", "Miso Robotics Equity Crowdfunds \$17M, Extends thespoon.tech - Chris Albrecht - 26 Jan 2021", "ServiceNow closes US\$230-million acquisition dmv.it - Sean Silcott - 15 Jan 2021", and "What Most People Don't Understand About AI". Below these sections is a "My Searches" button and an "Insight Feed" button. The "Insight Feed" button is highlighted with a red border. The detailed view of the Insight Feed on the right shows a list of news items. The first item is from BIONTECH, dated Monday, March 08, 2021, with the headline "BioNTech co-founder says gender equality made vaccine possible" and the source "theguardian.com - PA Media". The second item is from PATENTING ACTIVITY, dated Thursday, March 04, 2021, with the headline "BioNTech (or one of its subsidiaries) published a new patent : Neoantígenos y usos de los mismos". The third item is from TOTAL, dated Thursday, March 04, 2021, with the headline "Total forms joint venture for C&I solar deployment in Saudi Arabia" and the source "zpr.co - Jules Scully". The fourth item is from TOTAL, dated Thursday, March 04, 2021, with the headline "Clean Energy, Total sign JV for renewable natural gas production" and the source "reuters.com - Reuters Staff". The fifth item is from TOTAL, dated Thursday, March 04, 2021, with the headline "It's like LNG 40 years ago.' Total and Iberdrola CEOs weigh the future of hydrogen" and the source "fortune.com - Katherine Dunn". The sixth item is from PATENTING ACTIVITY, dated Thursday, March 04, 2021, with the headline "Total (or one of its subsidiaries) published a new patent : Organic-solvent based coating composition for coating a surface of a metal substrate for increasing the coefficient of friction of the surface of the metal substrate". The seventh item is from PATENTING ACTIVITY, dated Thursday, March 04, 2021, with the headline "Total published a new patent : Process for producing vinyl aromatic (co)polymer incorporating post-consumer and/or post-industrial recycled polystyrene". The eighth item is from PATENTING ACTIVITY, dated Thursday, March 04, 2021, with the headline "Total published a new patent : Expandable vinyl aromatic polymers with improved flame retardancy". The Insight Feed also includes a "Monitor Companies" and "Monitor Searches" section at the top. The dashboard on the left also includes a "Get FRESH NEWS and LATEST UPDATES about SEARCHES & COMPANIES that MATTER FOR YOU" section. The footer of the dashboard includes the Orbit Insight logo and the text "YOUR WEEKLY OR MONTHLY INSIGHT FEED DELIVERED IN YOUR MAILBOX". The footer of the Insight Feed includes the text "E-learning - Questel academy" and a "Help" button.

Orbit Insight

Big picture thinking to come up with ideas, solutions & opportunities

Enter concept (biomarker, autonomous vehicle,...) or organisation (Facebook, Samsung,...)

Last searches

- insights on **lidar** (or laser scanner, photoelectri,...)
- insights on **MRNA vaccine** (or Messenger ...)
- insights on **artificial intelligence** (or machi,...)
- insights on **artificial intelligence** (or machi,...)
- insights on **biomarker**

My Searches

Last news

- DefinedCrowd CEO Daniela Braga on the future of AI - Lisa Stiller - 13 Mar 2021
- Interview with Buck Jordan, Miso Robotics CEO - socattech.com - Benjamin F. Kuo - 8 Mar 2021
- Deloitte to launch AI Institute initiative in Canada - Isabelle Kirkwood - 3 Mar 2021
- Peak AI nabs \$21M for a platform to help non-derivatives - Ingrid Lunden - 17 Feb 2021
- Miso Robotics Equity Crowdfunds \$17M, Extends thespoon.tech - Chris Albrecht - 26 Jan 2021
- ServiceNow closes US\$230-million acquisition dmv.it - Sean Silcott - 15 Jan 2021
- What Most People Don't Understand About AI

Insight Feed

YOUR WEEKLY OR MONTHLY INSIGHT FEED DELIVERED IN YOUR MAILBOX

Get **FRESH NEWS** and **LATEST UPDATES** about **SEARCHES & COMPANIES** that **MATTER FOR YOU**

Insight Feed

Monitor Companies | Monitor Searches

BIONTECH

WEB NEWS

BioNTech co-founder says gender equality made vaccine possible
theguardian.com - PA Media
MONDAY, MARCH 08, 2021

PATENTING ACTIVITY

BioNTech (or one of its subsidiaries) published a new patent : Neoantígenos y usos de los mismos

Nothing about **CORPORATE ACTIVITY** **NETWORK & INFLUENCE** **SCIENTIFIC ACTIVITY**

TOTAL

WEB NEWS

Total forms joint venture for C&I solar deployment in Saudi Arabia
zpr.co - Jules Scully
THURSDAY, MARCH 04, 2021

Clean Energy, Total sign JV for renewable natural gas production
reuters.com - Reuters Staff
THURSDAY, MARCH 04, 2021

'It's like LNG 40 years ago.' Total and Iberdrola CEOs weigh the future of hydrogen
fortune.com - Katherine Dunn
THURSDAY, MARCH 04, 2021

PATENTING ACTIVITY

Total (or one of its subsidiaries) published a new patent : Organic-solvent based coating composition for coating a surface of a metal substrate for increasing the coefficient of friction of the surface of the metal substrate

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Nothing about **CORPORATE ACTIVITY** **NETWORK & INFLUENCE** **SCIENTIFIC ACTIVITY**

E-learning - Questel academy

Help



We provide the tools. You create the future.

So what are you waiting for?

Get in touch and ask for a personal demo or talk
with one of our experts.

contact help@questel.com

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explore www.questel.com/resources-hub