## 

GET INSIGHTS ON AI UNDER 10 MINUTES



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BY 2023, 30 'FULLY CONNECTED' 5G FACTORIES IN CHINA WILL BE BUILT

**Sector Focus** 

AI – MANUFACTURING SECTOR'S KEY DISRUPTOR IN POST-COVID ERA

DESIGNING THE WORLD'S FIRST STANDARDS FOR SECURING



"China aims to build 30 "fully connected" 5G factories in 10 key industries by 2023, as the country has fast-tracked industrial Internet development through integration with 5G technologies. Three to five industrial Internet platforms with international influence will come into being and a big data center for industrial Internet will be established by 2023, said an action plan on industrial Internet development for the next three years, which was unveiled by the Ministry of Industry and Information Technology (MIIT)."

The action plan indicated that the next three years (2021-2023) will be the period of the rapid growth of China's industrial Internet. Intelligent manufacturing, network-based collaboration and personalized customization, examples of emerging busines formats will prevail during the period.

"The industrial Internet, also known as the Internet of Things (IoT) for industry, refers to broader adoption of advanced technologies such as next-generation wireless networks, big data and artificial intelligence and IoT."

According to MIIT data, it can be seen that in China, over 70 industrial internet platforms has already been nurtured into regional influence, linking about 60 million sets of industrial equipment and more than 400,000 industrial enterprises.

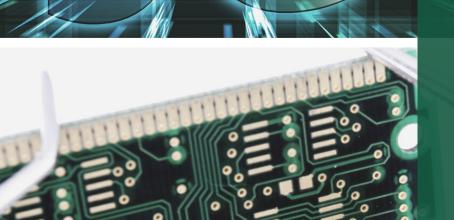
SOURCE: CHINA DAILY



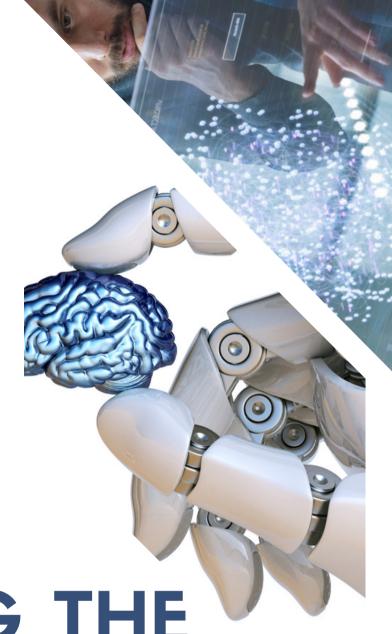
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Problem of securing Al-based systems and solutions is described in the Report, focusing on machine learning, and the challenges relating to confidentiality, integrity and availability at each stage of the machine learning lifecycle. Some of the broader challenges of Al systems including bias, ethics and ability to be explained were pointed out by the Report. A number of different attack vectors are outlined, as well as several cases of real-world use and attacks.



# DESIGNING THE WORLD'S FIRST STANDARDS FOR SECURING AI

There are a lot of discussions around AI ethics but none on standards around securing AI. Yet, they are becoming critical to ensure security of AI-based automated networks. This first ETSI Report is meant to come up with a comprehensive definition of the challenges faced when securing AI. In parallel, we are working on a threat ontology, on how to secure an AI data supply chain, and how to test it," explains Alex Leadbeater, Chair of ETSI SAI ISG. Defining AI is the first step to identify the issues involved in securing AI.

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# DEFINING AI IS THE FIRST STEP TO IDENTIFY THE ISSUES INVOLVED IN SECURING AI.

"For the ETSI group, artificial intelligence is the ability of a system to handle representations, both explicit and implicit, and procedures to perform tasks that would be considered intelligent if performed by a human. This definition still represents a broad spectrum of limited possibilities. However. а set technologies are now becoming feasible, largely driven by the evolution of machine learning and deep-learning techniques, and the wide availability of the data and processing power required implement to train and such technologies.

Numerous approaches to machine learning are in common use, including supervised, unsupervised, semi-supervised and reinforcement learning. Within these paradigms, a variety of model structures might be used, with one of the most common approaches being the use of deep neural networks, where learning is carried out over a series of hierarchical layers that mimic the behaviour of the human brain.



Various training techniques can be used as well, namely adversarial learning, where the training set contains not only samples which reflect the desired outcomes, but also adversarial samples, which are intended to challenge or disrupt the expected behaviour.

While the term 'artificial intelligence' originated at a conference in the 1950s at Dartmouth College in Hanover, New Hampshire, USA, the cases of real-life use described in the ETSI Report show how much it has evolved since. Such cases include ad-blocker attacks, malware obfuscation, deepfakes, handwriting reproduction, human voice and fake conversation (which has already raised a lot of comments with chatbots)."

SOURCE: SECURITY WORLD MARKET



## IMITATING YOUR DEAD FAMILY THROUGH MICROSOFT'S PATENTED AI

Microsoft filed a December patent for an Al chatbot that has the ability to imitate your dead relatives so that you can have an instant messenger-style conversation with them from beyond the grave.

One would wonder which is creepier: Chatting with an algorithm that's imitating your dead relative or "one that's acting like a living celebrity who's off living their life somewhere else in the world. The Microsoft patent claims that the chatbot is more than capable of both. The patent mentioned "The specific person may correspond to a past or present entity (or a version thereof), such as a friend, a relative, an acquaintance, a celebrity, a fictional character, a historical figure, a random entity, etc."

"Thankfully, there's an extremely low chance that Microsoft's engineers ever actually build this system." Tim O'Brien, General Manager of Al Programs at Microsoft, tweeted that he's not aware of any plans to actually bring these jarring algorithms to life. "And yes, it's disturbing," O'Brien said in a different tweet.

SOURCE: FUTURISM



There has been warninas about misinformation being regularly posted on social media platforms like Twitter and Facebook but not all of these cautions are created equal. Rensselaer Polytechnic Institute's new research indicates that accurate news assessments can generated using artificial intelligence but only when a news is first emerging. The findings were recently published Computers in Human Behavior Reports by an interdisciplinary team of Rensselaer researchers.

## HELPING CONSUMERS IDENTIFY FAKE NEWS USING AI



"They found that AI-driven interventions are generally ineffective when used to flag issues with stories on frequently covered topics about which people have established beliefs, such as climate change and vaccinations.

However, when a topic is so new that people have not had time to form an opinion, tailored AI-generated advice can lead readers to make better judgments regarding the legitimacy of news articles. The guidance is most effective when it provides reasoning that aligns with a person's natural thought process, such as an evaluation of the accuracy of facts provided or the reliability of the news source."

SOURCE: TECHXPLORE

HEADLINE NEWS IN A FLASH AI:10

## South Korea to Develop AI Translator to Support OTT Industry

Development on an artificial intelligence-powered translator for local video streaming services as part of South Korea's broader support plan for the fast-growing over-the-top (OTT) media industry is on its way, said the South Korea's ICT ministry.

The Ministry of Science and ICT said it is pursuing the development of the Al-based translation technology as the country's OTT market experiences rapid growth and local OTT services begin eyeing overseas expansion with their Korean-language content. South Korea's OTT usage rate stood at 52 percent in 2019, compared with 42.7 percent the previous year, according to government data. There will be more strengthened support for local OTTs to capture more viewers such as assisting coordination with device makers to target overseas markets, said the ICT ministry. The ministry also plans to provide tax credits to encourage original content production and pursue a legal revision for OTTs to adopt a self-rating system for their content to speed up their release.

SOURCE: SAUDIGAZETTE





## INDIA'S AGENDA: TRANSFORMING SEA PORTS INTO "SMART PORTS"

India is all set to transform its sea ports into "smart ports", upgrading them to "intelligent ports" in due course. In this pursuit, Industry 4.0 technologies such as artificial intelligence and machine learning would be put to use, and smart traffic management tools would not only "simplify and smoothen the operations of major ports" but add to efficiency. All this is envisioned in the Maritime India Vision-2030. Meanwhile, during the three-day brainstorming or "Chintan Baithak", Mansukh Mandaviya, Minister of Ports, Shipping and Waterways, expressed "optimism, dedication and motivation to put India on the world map as the maritime leader".

There is a worldwide drive to digitalize ports and the global market for the "smart port" segment is projected to be \$5.3 billion by 2024 from an estimated \$1.7 billion in 2019, at a CAGR of 25 per cent. Industry experts have cautioned that "smart ports are the only ports that will survive".

SOURCE: WEBINDIA



# AI – MANUFACTURING SECTOR'S KEY DISRUPTOR IN POST-COVID ERA

"Artificial Intelligence (AI) has impacted a substantial number of processes in the manufacturing industry with computer vision, a field of AI that trains computers to interpret and understand the visual world, being the most used technique. As businesses prepare to enter a post-pandemic marketplace, adopting a forward-thinking, AI-first approach will be key to future success.

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## HERE ARE THE THREE AREAS IN WHICH AI WILL HAVE THE MOST IMPACT:



#### **HEALTH AND SAFETY**

Al can deliver real value by monitoring health and safety, in relation to both the people working on the factory floor and the machines they are working with. In this situation, Al can monitor movement and help to avoid accidents and dangerous interactions between humans and machines. Computer vision techniques can be deployed to count the number of people available on the manufacturing floor; and in a post-Covid world where workplace social distancing is essential, Al will be vital in ensuring adherence to new and existing health and safety regulations.

Powerful optical character recognition (OCR) engines can also be deployed within the manufacturing line to convert typed or handwritten content into machine readable, editable formats. This allows the machines to read and understand the text so that track and trace tools can be deployed to post-production. Additionally, computer vision is helping with the physical inspection of machines as well as controlling their calibration and tuning and monitoring their health. Monitoring the health of machines means looking at many parameters and finding any anomalous combinations that could potentially cause downtime. Impact of machine downtime can inflate costs to manufacturers, including loss of working days for the entire workforce. Therefore, the ability to predict which pieces of equipment require maintenance before the machine becomes unusable will help to reduce or completely avoid machine downtime; productivity and saving significant amounts of money.

#### SUSTAINABILITY

A further benefit AI can bring the manufacturing industry is increased sustainability as it enables better utilisation of which resources. helps manufacturers become more efficient. As production slowly starts to pick up again after a three-month hiatus. manufacturers are navigating the unprecedented situation of having to manufacture demand for the foreseeable future, and efficiency will be critical. By determining which units are underutilised and which are consuming large amounts of power, Al can then recommend the optimised way to run those machines to help reduce energy consumption; environmental impact and costs.







Al will help manufacturers improve their ability to avoid failures and downtime, optimise processes and machines, increase sustainability, improve quality control, and monitor the health and safety of employees who are navigating the strange, post-pandemic workplace of the future.



## PROBABILITY OVER DETERMINISM

Traditionally, the manufacturing industry relied heavily on deterministic processes. As AI becomes more prevalent, however, it requires them to shift their approach and rely, at least partly, on probability. That shift could challenging. Al brings in an element of probability to the workflow and the industry must embrace this change to see its value. For example, a production line could have a standard operating procedure for machine downtime, but its new Al system may predict a 60 percent chance of prediction, downtime. This therefore. requires processes and hierarchies to be reworked to accommodate the 60 percent downtime probability.

While this necessitates change, manufacturers can make this more manageable by applying a probabilistic approach to one workflow at a time and ensure it seeps through to their employees to fully embed this new way of working weathering any initial difficulties to focus on the long-term value. Al will help manufacturers improve their ability to avoid failures and downtime, optimise processes and machines. sustainability, improve quality control, and monitor the health and safety of employees who are navigating the strange, postpandemic workplace of the future.

As Al is used to automate more processes, it will help to avoid accidents and reduce human error. Ultimately, Al is going to disrupt not only the processes involved with manufacturing, but it will also disrupt the mindsets and approaches adopted by those within the industry."

SOURCE: EXPRESS COMPUTER

## RESTORE & **REBUILD 2021/22**

: Helping SMEs Turn Plans Into Reality

#### USE ALTO INTERPRET COMPETITIVE AND BUSINESS STRATEGIES WITH FINANCIAL DATA

Enterprises are hit hard financially due to Covid-19. Their existing business models need an overhaul to deal with the new world order. Access to quality experts may be costly and difficult. As the crisis puts a curb on sales activities, organisations must drive cost optimisation, production capacity and cash conservation to maintain financial health.

MyFinB develops algorithms that writes stories from data to drive understanding and results. Powered by artificial intelligence, our technology automatically turns data into easy-to-understand reports, transforms statistics into stories, and converts numbers into knowledge.



#### DELIVERABLES



**Financial** Strategy Report

Detailed insights of your financial health, with key focus areas. recommendations and impact assessment



3-min **Financial** Review **Podcast** 

Up to 5-min audio analysis of issues, action plans and outlook. summarised for ease of understanding.



Market Scanning Report

Review of latest industry dynamics, trends and issues, with sentiment and word cloud analysis.



1-hour One-on-One Discussion x 1

One session to go through your company strategies and move into actions over one hour.



1-hour Group Workshop хЗ

Monthly virtual workshops (x3) to go through concepts and applications on a scheduled basis



10X (optional)

Insights of management / leaders' personality: comparison of their attributes again unicorn leaders



MAPPING THE BRAINS OF TOP EXPERTS IN A SYSTEM!

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The AI World Summit will bring together the global AI community from a range of businesses, science and tech to go beyond the buzz and hype, discuss the most burning AI issues, share their developments, successes, challenges, and the resultant impact

on their businesses.

5 DAYS | 14+ TRACKS | 90+ SPEAKERS | 40+ COUNTRIES | 5 CONTINENTS

## AI WORLD SUMMIT

WHERE INNOVATORS & DISRUPTORS MEET TO CHALLENGE LIMITS

Powered by MyFinB.com



If you are interested in speaking, sponsorship or collaboration opportunities for the summit, please write to us at aisummit@MyFinB.com.

## **THREE WAYS YOU CAN BUILD & OWN AI** WITHOUT CODING

#### You have an idea



Yes - this idea must originate from a pressing need, pain point or an opportunity that your associated with current operations and/or industry dynamics.

There must be a ready demand for that idea to be transformed into a system - otherwise it has to be incubated or "cook" to be ready for the

### From idea to system prototype and business plan



We design algorithms and build the business case around the system with our vast expertise in any discipline.

8 core deliverables will be rendered:

- 1. Mock-up Reports 2. Technological Blueprint
- 3. Roadmap 4. Prototype 5. Case Studies 6. 1min Demo Video 7. Press Release 8. Pitch Deck

### (+) We both ....



jointly own the IP in accordance to a preagreed ratio where MyFinB funds the full capex while you cover the costs of the prototype

We commercialise and launch them to the market based on the pre-agreed specifications and after the full system development is completed by MyFinB. Roles responsibilities would have been detailed out, and a long-term partnership is forged.

## BUILD INNOVATION **WITH US**

MyFinB is an award-winning, high growth AI start-up with core operations in KL/SG and serving more than 30 markets globally.

We specialise in Artificial Intelligence and Natural Language Generation & Understanding (NLGU). Our Al-powered solutions translates structured data (financial statements, bank statements, incorporation info) and unstructured data (publications, social media, journals and video images) into decisioning reports.

MyFinB uses its proprietary NLGU and Cognitive Analytics capabilities to serve 10 core segments: Financial institutions, Enterprises / SMEs, Accounting and Auditing Firms / Consultants, Government Agencies, Credit bureaus, Stock Exchanges, Insurers, Trade Associations and Business chambers, Universities and Investment Promotion Agencies.

We manage a "digital factory" model where we help organisations build in-house capabilities via the Digital Al Labs (DIAL) programme. DIAL is a scheme of arrangement that helps organisations build and own A.I. expert systems - to solve a specific issue with a commercial goal in mind.

MyFinB's DIAL Programme offers a unique Al-as-a-Service (AlaaS) platform to overcome the barriers of adopting Al Systems. DIAL targets people without the knowledge of coding and programming to build their own expert systems for their organisations. ■

## "NOW EVERYONE CAN BUILD AND **OWN AI WITHOUT CODING."**

TO FIND OUT MORE, PLEASE EMAIL: CEAI@MYFINB.COM



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Global Chamber® is a one-of-kind virtual and growing community of CEOs, executives and leaders in 525 regions around the world... everywhere... focused on helping companies grow in more than one metro area.

It is the ONLY organization in the world with hundreds of locations that helps executives grow their company through warm connections and a variety of virtual services.

Global Chamber's vision is a world where doing cross metro and cross border business is as easy as selling across the street. It also provides members with virtual connections, training, and information just right to grow... helping members connect with customers, partners and experts to grow across metros and borders. When members engage with Global Chamber, risk is reduced, and growth accelerates.



TheGlobalChamber



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