5Gn View
Remote Collaboration Project

5G Fan
CITC of China Unicom

Problem: 5G+AI+AR

The “AI+AR Industry Application” contest cover digital applications in all walks of life, and involve all aspects of the industrial Internet. Driven by 5G technology, the deep integration of AI and AR in industry intelligence applications should be closely linked to the empowerment of the industry’s digital upgrade and The theme of improving production efficiency.

"AI+AR Industry Application" can be dedicated to industrial manufacturing scenarios, for reference but not limited to

- Apply AI technology and AR technology to industrial remote maintenance, intelligent maintenance, automation training, visualization training and other operation and maintenance fields;
- Apply AI technology and AR technology to intelligent inspection, visual troubleshooting, intelligent collaboration and other inspection fields;
- Apply AI technology and AR technology to design, research and development display areas such as intelligent R&D, remote interactive design, spatial three-dimensional information tracking, and 3D content interaction.

Industry Pain Points

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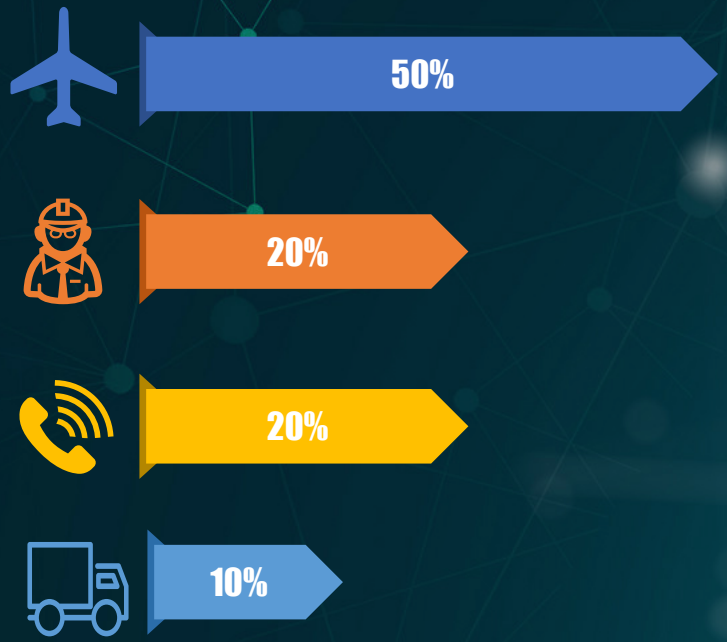
Repair, display, design, inspection, and assembly of large and complex products across regions. Due to time, space, and interaction constraints, communication costs are high but low efficiency



Experts are scarce and far away; round trips are expensive.

Operation errors are hard to avoid; problems are difficult to distinguish.

Telephone mail, easy to misunderstand; mark location, difficult to describe;Document delivery, no overlay; operation record, no archive.

The cost is too high, affecting production and use, and low efficiency

- Hands-on guidance
- Face-to-face communication
- Instant access
- File visualization
- Real-time interaction
- AR ability
- AI ability

5Gn View Remote Collaboration Solution

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Enterprise IT and support resources

Enterprise IT system

Enterprise empowerment platform 5Gn View

Enterprise Artificial Intelligence

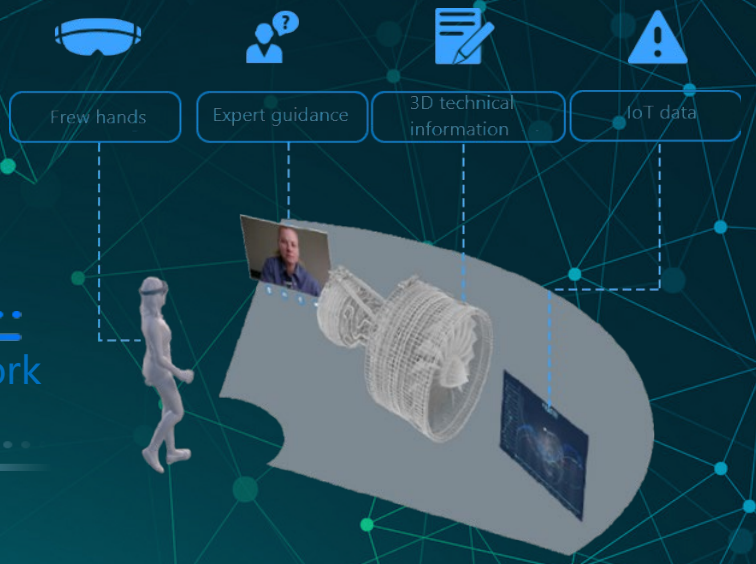
5Gⁿ View platform

5G Network

5G Network

As a microservice, Zhongxun Tech 5Gn View platform can be flexibly deployed on public/private/hybrid industrial cloud platforms
Mixed Reality Communication | Recording and Storage | Intelligent Inspection/3D modeling

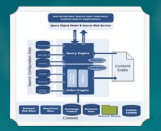
"Empower" on-site person



Designer,
Technical expert
Maintenance expert

First-view HD video

MR frozen screen labeling, real-time labeling



Multiple file format transmission

Rich equipment

Hololens1&2 Logistics scan code glasses
LLVision Epson
Self-developed goggles, glasses, etc.

Advantages of 5Gn View

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1. Multi-terminal access

Hololens1&2 Logistics scan code glasses
LLVision Epson
Self-developed goggles, glasses, etc.

2. Based on open source protocol

WebRTC
Redis
Flutter

3. 5G network & MEC

Network Optimization
MEC construction
Network quality monitoring

4. MR interaction capabilities and AI capabilities

3D assets management
AI recognition
MR interaction

5. The ability to connect with other systems

API interfaces
IoT access
Easy connect

6. Gloable Standard

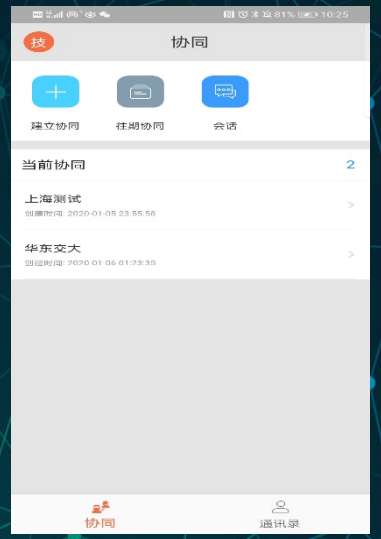
Mqtt
RTP
RTCP ...

5Gn View client interface

Platform

Platform domain name address：https://5gnview.5gnlive.cn/rs

Client



Open source protocol

Name	Address
nats	https://github.com/nats-io/nats-server
redis	https://github.com/redis/redis
beego	https://github.com/astaxie/beego
gstreamer	https://github.com/GStreamer/gstreamer
dragm	https://www.npmjs.com/package/dragm
crypto-js	https://www.npmjs.com/package/crypto-js
swiper	https://www.npmjs.com/package/swiper
flutter_ijkplayer	https://pub.dev/packages/flutter_ijkplayer

Global Standards

Global Standards
VP8
H.264
Mqtt
RTP
RTCP
…

5Gn View Application Prospects

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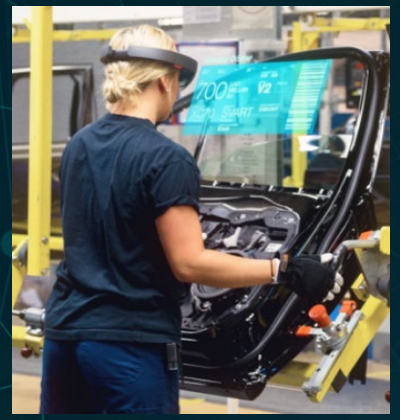
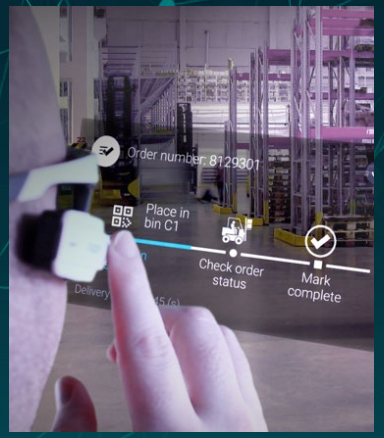
According to the empowerment scheme of different applications of enterprises, based on 5Gn view mixed reality communication service, different terminals are applied, smart glasses, product development for industrial enterprises, product display, intelligent assembly, production line inspection, on-site maintenance support and other custom development application platform for different scenarios.

Scenery



Smart manufacturing

Design and development



Equipment inspection

Marketing

Remote training

After-sales service

Smart warehousing

5Gn View Product Application Case 1

Changan Automobile

Form an expert panel through 5Gn View

1, the first-line repair personnel, especially 4S in-store technical personnel, remote maintenance, greatly improve maintenance efficiency.

2, the vast number of car owners on-line support, to assist car owners to correct their own glitches, guide the owner of the emergency start of the vehicle, to avoid roadside anchorage.

5Gn View Product Application Cases

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TEC 隧道股份

德邦物流 承载信任 助力成功

长安汽车 CHANGAN

Suparna Airlines 金鹏航空

重庆川仪自动化股份有限公司 CHONGQING CHUANYI AUTOMATION CO;LTD.

厦门地铁 AMTR

浙江稠州商业银行 ZHEJIANG CHOUZHOU COMMERCIAL BANK

太平洋保险 CPIC

中国一汽 品质 技术 创新

Final feedback & Question

Why we are the number one in 5G+AI+AR?

1. Combine 5G network with AI and AR, and the product meets market demand.
2. The product meets the market's pain points and can solve the actual problems of customers.
3. The product has actual landing experience and is worth promoting.
4. Comparing products with competing products, there are many advantages: such as multi-terminal access, MR interaction, 3D asset management…
5. Closely follow the topic of the subject and combine the advantages of operators to provide a wide range of product applications

Questions: Where is the product AI capability reflected?

1.Smart customer service

2.Smart knowledge repository

3.AI license plate recognition

4.AI-based AR real-time annotation

5.AI behavior control

THANKS

感谢观看

Q&A