

Military AI

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Warfare is changing

- Recently a huge change in terms of conventional war spaces:
 - Land Army, Navy, Air Force
 - + Space Forces
 - + **Cyberspace**
- Transition from Conventional Warfare to Information Warfare



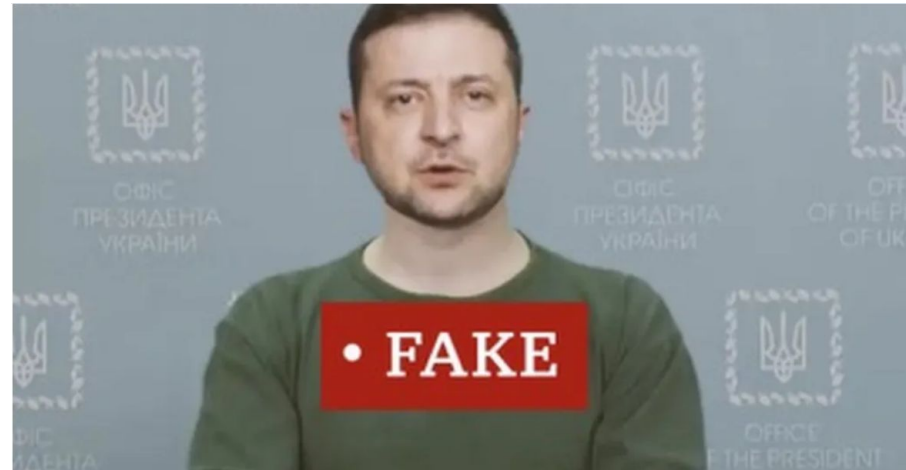
Automated drones

- Flying in swarms
- Facial recognition
- Movement predictions
- Rescue missions
- Search operations
- Jamming and spoofing
- Ravaging
- Unmanned Systems Forces



Other crucial applications

- Autonomous fighter jets
- Unmanned armed robots
- Cyberattacks that incapacitate critical port infrastructure
- Disinformation campaigns
- Deep fakes
- Foreign adversaries taking out satellites



AI - Data war

- Everything boils down to data
- Indispensable hardware and cloud for storing information
- Processed data from sensors and collaborations with tech companies
- Target: data as a military asset



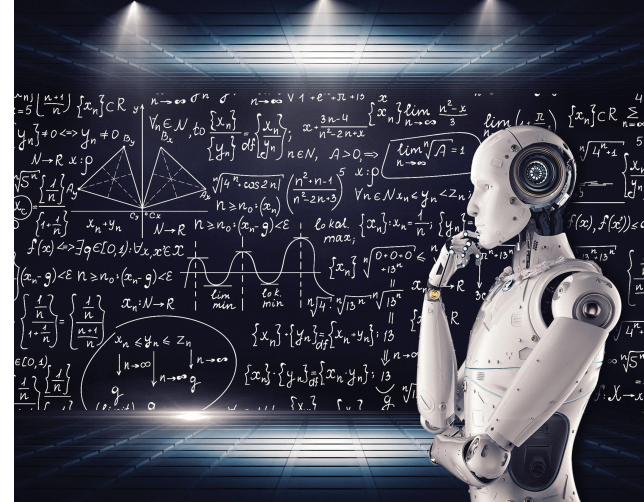
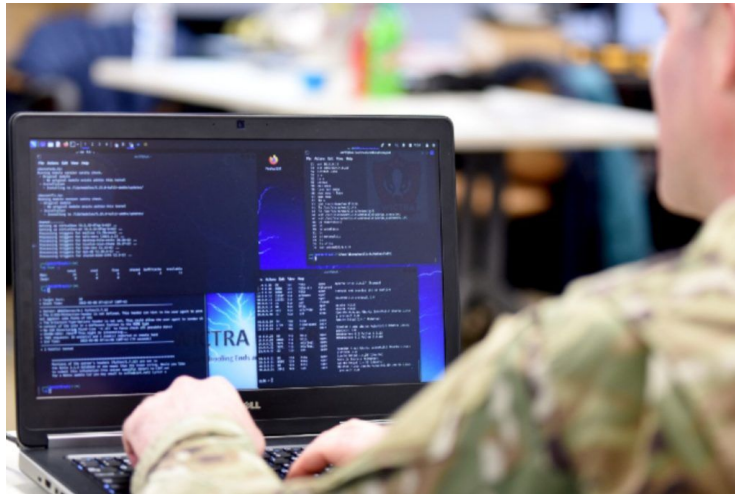
China vs US - AI Cold War

- China spends 10x more for AI in military
- US tech industry still shies away from taking on government contracts
- China leads in machine vision AI, in LLM like Chat GPT just the fast followers
- Chinese published 40% of all global AI publications in 2021, US only 10%



Future predictions

- Cyberspace will become the dominant force in 5-10 years
- Increasingly powering warfare
- Audio-visual disinformation content nearly impossible to identify
- Needed investment in proper data preparation and infrastructure
- Data - new kind of ammunition
- Centralized data centers and embedded computing systems are necessary
- Aim: Reduction of casualties



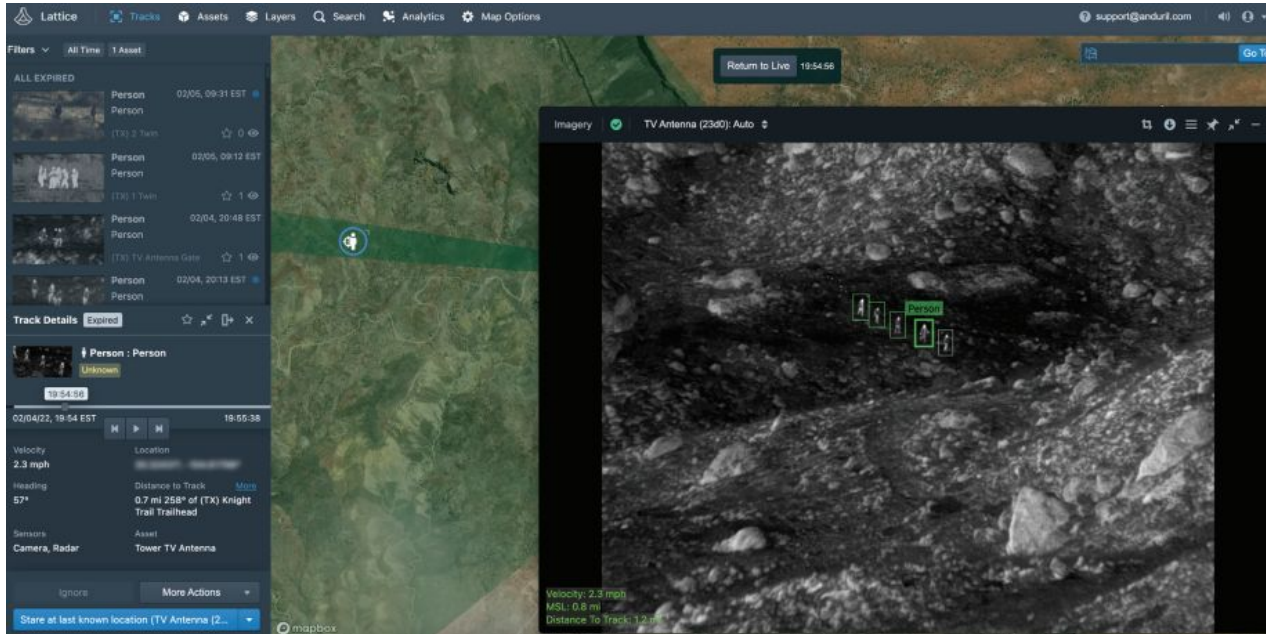
Companies

- Palantir
- Anduril
- Shiel AI
- Scale AI
- BAE Systems
- Lockheed Martin
- And more...



Anduril

- Lattice



Shield AI

- NOVA



- V-BAT



LAWS

- Malfunction
- Lack of Accountability
- Hacking
- Lack of Human Control

Ethical codes	Human dignity	Privacy	Human autonomy	Fairness
A14PEOPLE	Benevolence fosters overall well-being and protects the environment on a global scale	No secrecy	Human agency and autonomy	Maintaining and advancing justice and solidarity
EAD2	Putting the growth and well-being of everyone first	N/A	Human rights	Objectivity and accountability
MONTREAL	Putting the general welfare first	Privacy and intimacy are protected	A fully autonomous and responsible human being	Fairness and diversity inclusion/solidarity
COMISION UE	Respecting a robot's decision to refuse care	Defending any human against harm and granting them complete freedom in the face of any violations of their privacy	Defending against the threat of robot manipulation	Preventing the severance of social relationships
UK LORDS	N/A	Intelligibility/explainability/transparency	N/A	Education, social and political cohesiveness, and inequality
ACM	Overall personal and societal well-being	Full privacy	N/A	Fairness/Nondiscrimination
GOOGLE	Socially beneficial	Users' safety and privacy	N/A	Be responsible for human role equity and refrain from fostering unfair bias
COMEST	Human dignity	Privacy/do not harm	Human autonomy	Responsibility

To ban or not to ban

To ban:

- Trojan horse
- Spoofing
- Misclassifications
- Ethics
- Legal

Not to ban:

- Human factor
- Reduce the risk taken
- Connection issues
- Extreme conditions

Sources

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Thank you for your attention!