Will You Learn Chinese to Advance in AI
Nihao! I’m Charlotte Han / 韓亦瓏

- I process data and compute digital strategies for a living
- Taiwan -> U.S. -> Germany
- Passionate about helping people understand how technologies can advance human lives

@sunsiren
This is my view, not necessarily my employer’s.
The Chinese Room
China, Before Century of Humiliation
1839 to 1949

By Henri Meyer
By year 2030, China wants to be the world leader in AI.
AAAI-17 clashed with the Chinese New Year, so it was postponed.
“World” Intelligence Congress

Third World Intelligence Congress

智能新时代：进展、策略和机遇

Intelligence New Era: Progress, Planning and Opportunity

2019.5.16-19 16-19 May 2019

http://info.wicongress.org/
Alibaba Cloud: “THE” Computing Conference
(...Alibaba Did Change the Name to APSARA)
“World” Artificial Intelligence Conference 2019
Bird’s Eye View: Applied AI in China
China’s AI Leaders: Baidu, Alibaba & Tencent
BAT: Top-Heavy, Application-Focused AI Industry

BAT has promoted a top-heavy, application-focused AI industry

<table>
<thead>
<tr>
<th>Application</th>
<th>Technology</th>
<th>Foundation</th>
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<tbody>
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<td>Other</td>
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<td>Baidu</td>
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Chart: MIT Technology Review • Source: Karson Elmgren via Huxiu.com • Created with Datawrapper
WeDoctor backed by Tencent
Application-Focused Chinese AI Ecosystem

- Algorithms, and platforms
- NLP & Voice Recognition
- Computer vision

- Autonomous driving; robotics; drones; facial recognition in security, retail, and banking; smart city, smart homes; AI in medical; virtual assistant

- Trying to catch up in chip design; market share
- Catching up in research quality
Matthew Brennan @mbrennanchina · Mar 24

Wow! China Airport face recognition systems to help you check your flight status and find the way to your gate. Note I did not input anything, it accurately identified my full flight information from my face!
Matthew Brennan @mbrellnanchina · Apr 4
Whoa! 'Withdrawal by Face' now an option on my Chinese bank's ATM cash machines. No card needed anymore just bring your face
#facialRecognition #刷脸取款
Matthew Brennan @mbrennanchina · Apr 9

"Ride the subway using only your face" China's first subway lines to use facial recognition ticketing systems are here. Article (Chinese):

JD.com Fully Automated Warehouse in Shanghai
JD.com’s Drone Delivery in Rural Areas
Concerns About Government Surveillance

AI experts are calling on Amazon to stop selling facial recognition to law enforcement

By Anna Kramer  April 5, 2018
Application-Focused Chinese AI Ecosystem

**Applications Layer**

- Autonomous driving; robotics; drones; facial recognition in security, retail, and banking; smart city, smart homes; AI in medical; virtual assistant

**Technology Layer**

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**Foundation Layer**

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MindSpore – Available NOW
All-scenario AI computing framework
全场景AI计算框架MindSpore正式发布
Application-Focused Chinese AI Ecosystem

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**Chip**
- Huawei
- Cambricon
- Horizon Robotics

**Cloud**
- Tencent Cloud
- Alibaba Cloud
Most-Cited Papers: China vs. the U.S.

Source: Allen Institute for Artificial Intelligence
Top H-Index for Computer Science & Electronics by Country/Region

Source: Guide2Research
Top H-Index for Computer Science & Electronics by Country/Region

Source: Guide2Research

English is the official language
Hong Kong has 40!
Taiwan has 13!
Where Are the AI Startups?

Unicorns: over $2B
- China: 5
- U.S.: 5
- U.K.: 1

Top 100 AI Startups
- U.S.: 70+
- U.K.: 6
- China: 6
- Israel: 6
<table>
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<th>Company</th>
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<td>SenseTime</td>
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<td>DataRobot</td>
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Source: cbinsights.com
AI Need to Be Inclusive
Chinese Researchers Collaborating Internationally

**COLLABORATION CONNECTIONS**

The number of research papers with Chinese and international co-authors has increased over the past 15 years.

- United States
- EU/EAA*
- Australia
- Canada
- Japan

*EU/EAA, European Union and European Economic Area countries*
Baidu, Inc. is the leading Chinese language Internet search provider. Baidu’s mission is to make a complex world simpler through technology. After years of commercial exploration, Baidu has formed a comprehensive AI ecosystem. Baidu is now at the forefront of the AI industry in terms of fundamental technological capability, speed of productization and commercialization, and “open” strategy.
There is no trust without “us”.
The Government Does Not Equal to the People
Whether You Learn Chinese or Not
Please Consult Before Getting a Chinese Tattoo
Thank you!

Get in touch: @sunsiren
Rate today’s session

Cyberconflict: A new era of war, sabotage, and fear

We're living in a new era of constant sabotage, misinformation, and fear, in which everyone is a target, and you're often the collateral damage in a growing conflict among states. From crippling infrastructure to sowing discord and doubt, cyber is now the weapon of choice for democracies, dictators, and terrorists.

David Sanger explains how the rise of cyberweapons has transformed geopolitics like nothing since the invention of the atomic bomb. Moving from the White House Situation Room to the dens of Chinese, Russian, North Korean, and Iranian hackers to the boardrooms of Silicon Valley, David reveals a world coming face-to-face with the perils of technological revolution—a conflict that the United States helped start when it began using cyberweapons against Iranian nuclear plants and North Korean missile launches. But now we find ourselves in a conflict we're uncertain how to control, as our adversaries exploit vulnerabilities in our hyperconnected nation and we struggle to figure out how to deter these complex, short-of-war attacks.

David Sanger
The New York Times

David Sanger is the national security correspondent for the New York Times as well as a national security and political contributor for CNN and a frequent guest on CBS This Morning, Face the Nation, and many PBS shows.

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