Panel on AI & ML Hype: Challenges & Opportunities

What does AI mean to me in my world?

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Analysing the Fundamentals

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"China is the Saudi Arabia of Data" Kai-Fu Lee

- AI is driven by data: a fundamental shift is underway … from the 'Age of Expertise' to the 'Age of Data'

- 2013 saw a step change in innovation in China tech:
  - Five years of online e-commerce with massive volumes
  - QR code shopping, delivery services, transportation and even personal health real world data has been captured over years
- China is now the world's largest producer of digital data

Mass entrepreneurship and mass innovation = China today

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Facial Recognition & Driverless Cars

- China is linking smart city plans to technology: 450 million cameras will be in place by 2020: Beijing is already 100% covered

- China is developing a facial recognition system that can match faces to a database of 1.3 billion ID photos in 3 seconds targeting 90% accuracy

- Baidu's Project Apollo is offering open source access to its driving software and all training data to accelerate adoption of new technology

- The Xiongan mega-city project near Beijing is built for driverless and electric transport – to house 2 million by 2022!

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South China Morning Post

Tianjin city in China eyes US$16 billion fund for AI work, dwarfing EU's plan to spend US$1.78 billion

A major Chinese metropolis plans to set up a multi-billion dollar fund to spur development of the artificial intelligence (AI) industry, in what is the latest and probably largest effort by a single Chinese city amid the country's push to fulfil its ambition to become a world leader in AI by 2030.

Tianjin, a north-eastern port city outside Beijing, said it will establish a 100 billion yuan（ (US$15.7 billion) fund to speed up development of new generation AI technologies, according to a document posted on the city government's official website on Wednesday.
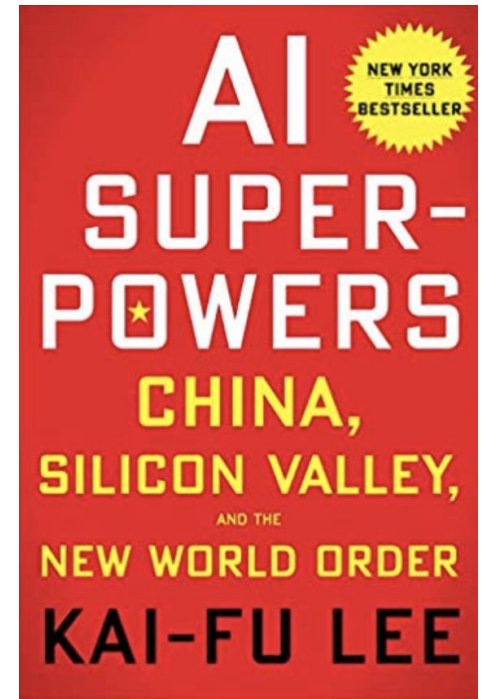
The money will be raised from financial organisations in China and abroad as well as from private enterprises and other market players, it said.

The planned fund comes as competition heats up between China and the United States in dominance of AI technologies, which are vital to enable an array of emerging applications from talking robots to self-driving cars. Tianjin's fund amount also dwarfs funding announced last month by the European Union Commission, which said it would boost investment in AI by 70 per cent to €1.5 billion (US$1.78 billion) between 2018 and 2020.

SCMP: 16th May 2018

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Kai-Fu Lee's Key Drivers
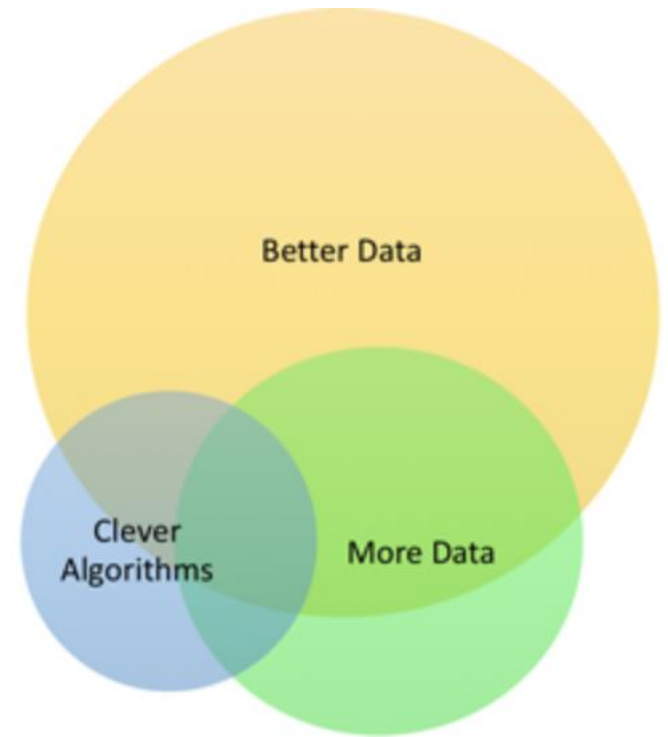
Harnessing the power of AI requires:

1. Abundant available and accessible data

2. Ambitious and well backed entrepreneurs

3. AI scientists and technical expertise

4. AI-friendly government

Compare how the leading western nations fare against China in these key areas

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Peter Norvig, Google Research

"More data beats clever algorithms but better data beats more data"

Example:

Autonomous vehicles generate between 5TB and 20TB of data <u>per day per vehicle</u>. All this data must be received, stored, protected, analysed in real-time – and retained for research and legal information (at least at the outset).

While most automotive manufacturers and suppliers understand the need for data analysis and retention, few have a strategy to digitalise and manage these massive amounts of data.

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Key Messages

- In market, opportunity and data generation terms, 1.4 billion is a very large number that cannot be ignored

- Chinese government planning is visionary, efficient and collectively supported – enabling business and society to move forward … this is unlikely to stop or change – regardless of the current Trade Dispute

- The West needs to be aware and should learn from the initiatives being driven by Chinese cloud and application platforms – mass data requires AI

- We should be seeking international ways to collaborate on the data mountain captured to date: JVs, strategic alliances, formal collaborations

- The challenges are significant but the opportunity China represents is a huge new market for technology end users and data centre operators

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