MACRO POLO
Decoding China's Economic Arrival

ChinAI

Building & Stumbling Blocks for China's AI Ambitions

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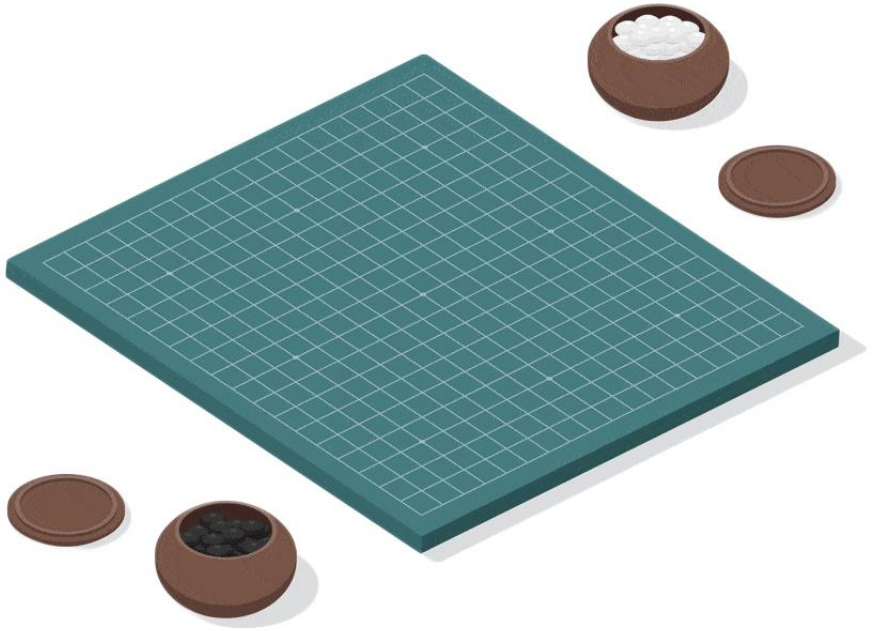
The Paulson Institute

To understand the state of play in China's AI ecosystem…



We have to break it down into its core building blocks

The Building Blocks

The Data

The Talent

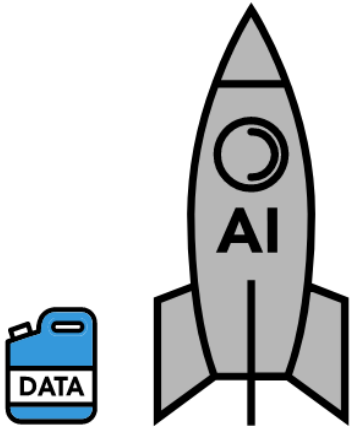
The Companies

The Plan

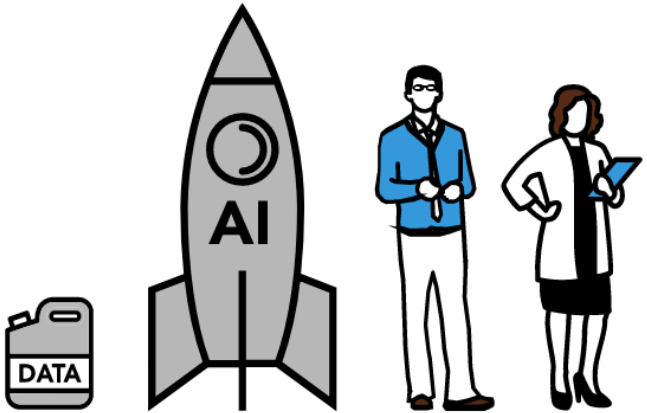
Coming soon: The Chips

If AI were a rocket…

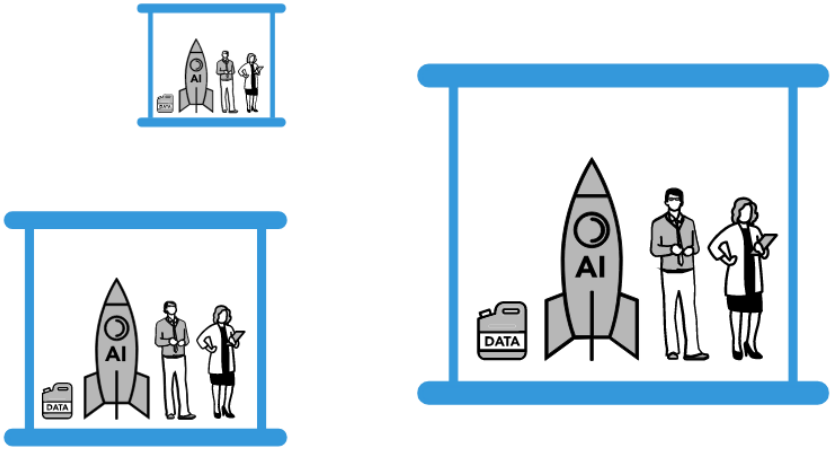
Data is the rocket fuel. For many AI applications, without it you go nowhere and the more you have, the further you go.



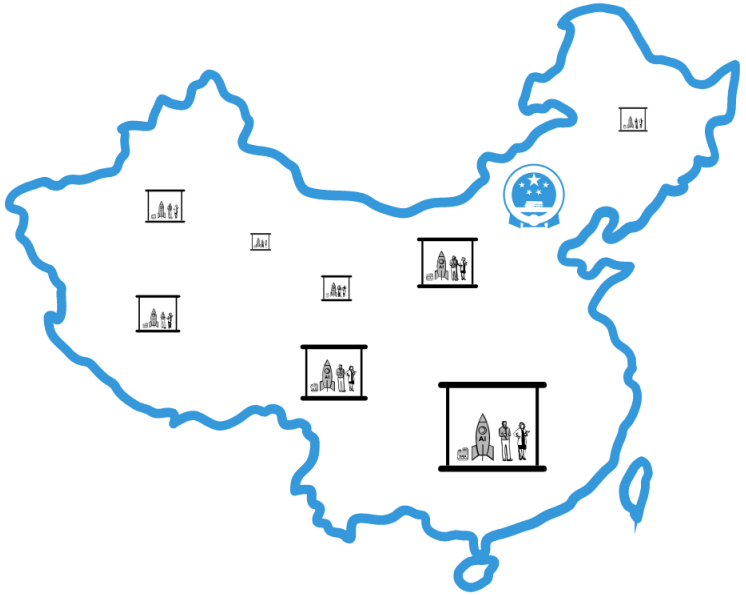
AI talent—machine learning PhDs, algorithm engineers—are the rocket scientists, designing the rockets and adding the fuel.



AI companies are the rocket companies that gather the data, employ the scientists, and commercialize the rockets.



The **government plan** is the policy environment that rocket companies act within, including subsidies, regulations on launches, building codes, and public partnerships.



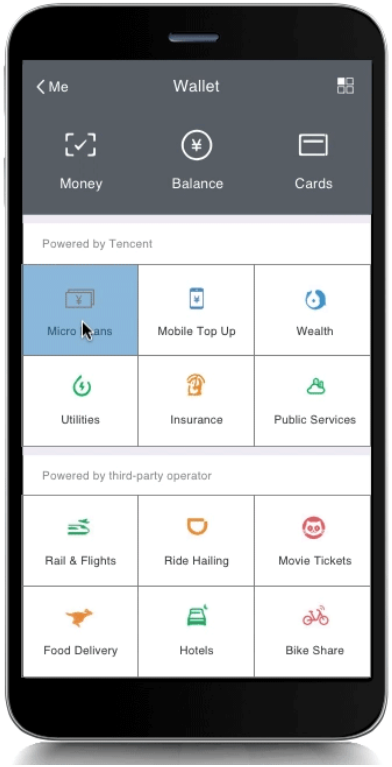
The Data

Data has many dimensions for

AI systems: breadth, depth, diversity, access, and quality.

“more” does not always = better

China's data strength: *depth*

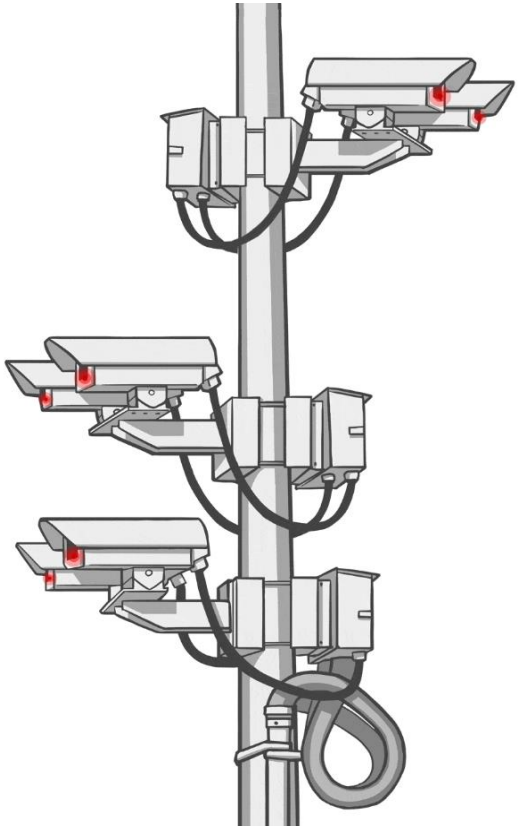


Micro Loans

This service generates data on small-scale lending and borrowing by users, services that are more widely adopted in China because the country never fully embraced credit cards.

This can be used to optimize products…

Or enhance surveillance…

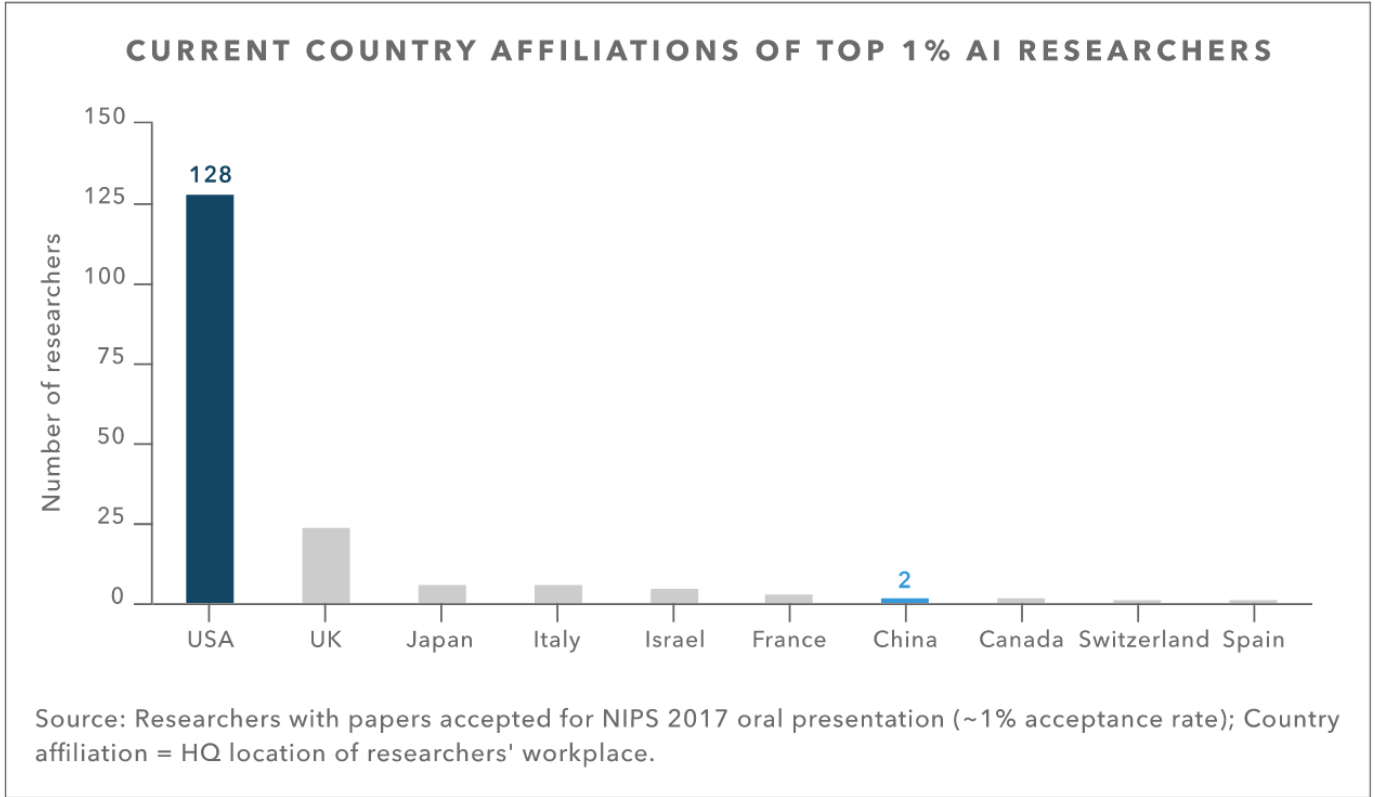


The Talent

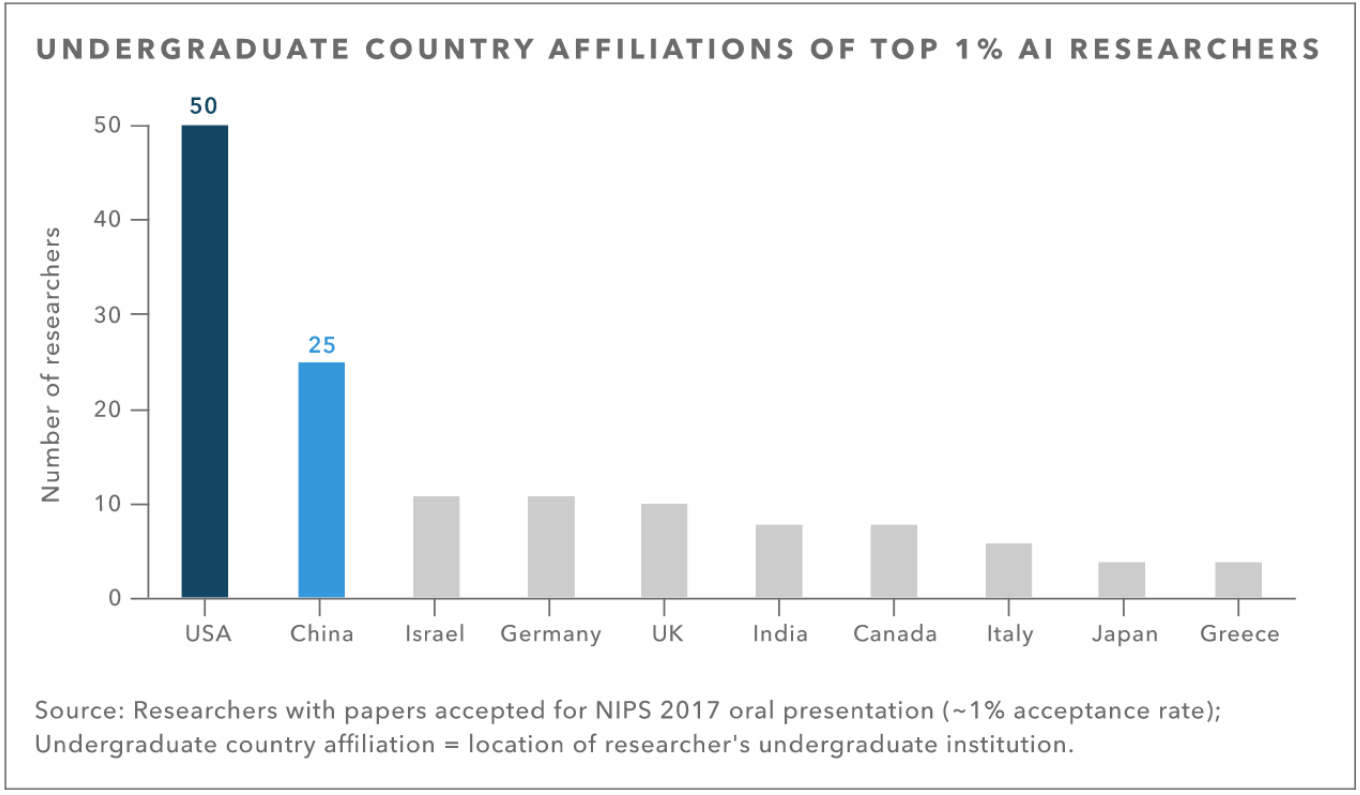
The Talent

Where are the world’s top AI researchers?

Where are they now?



Where did they go to college?



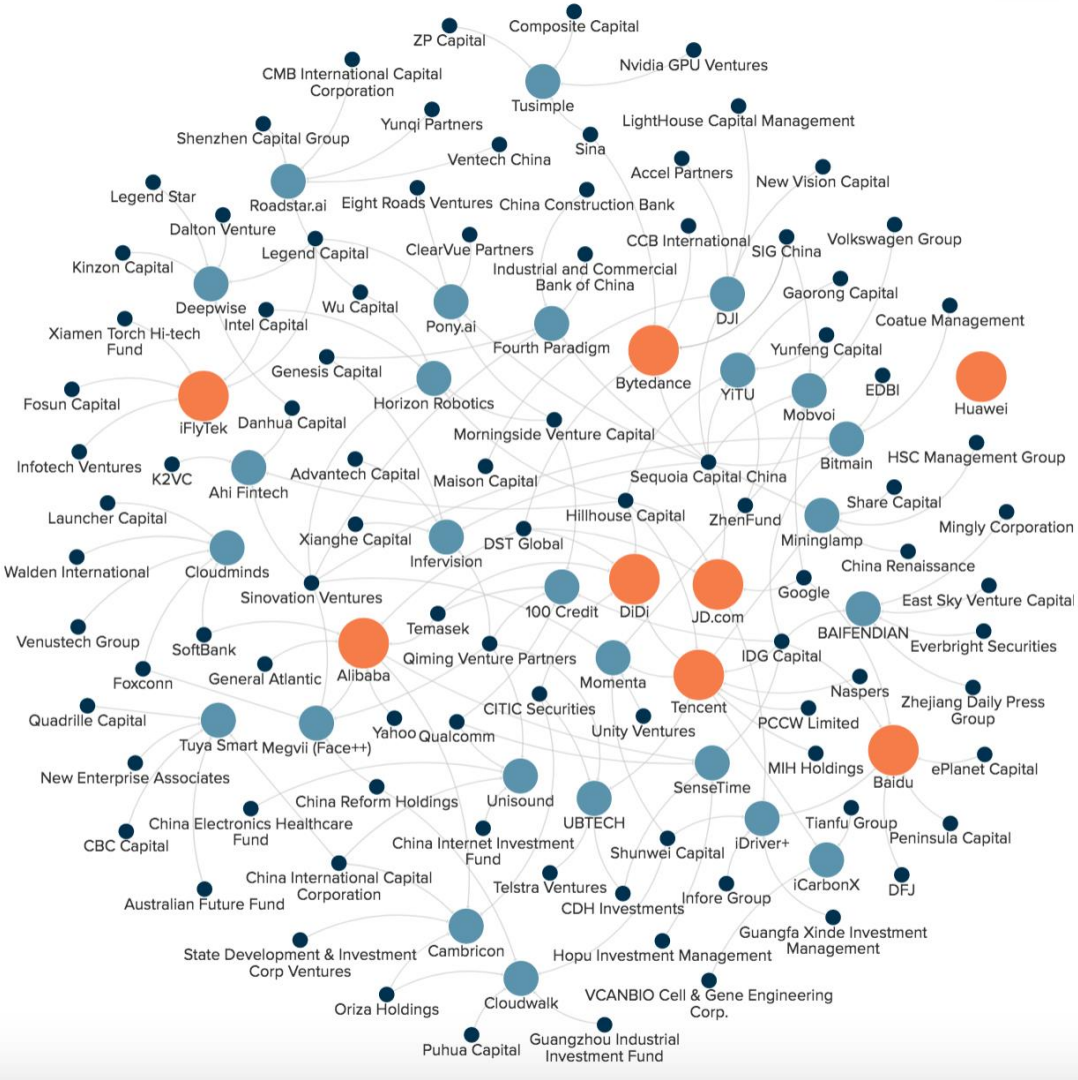
How did they get there?

The Companies

The Companies

Has China formed a self-sustaining ecosystem of AI investors, startups and tech giants?

Where are the centers of gravity in that ecosystem?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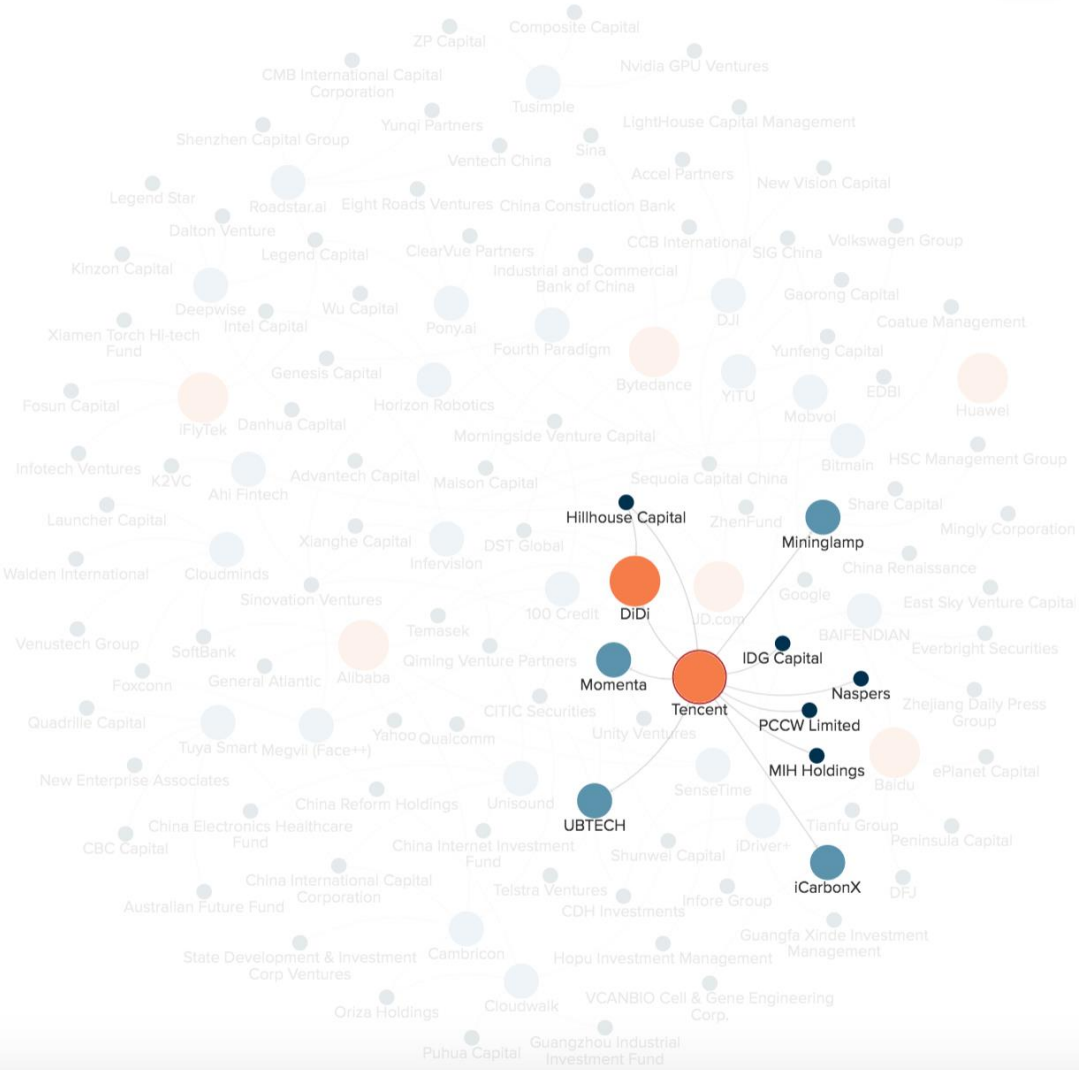
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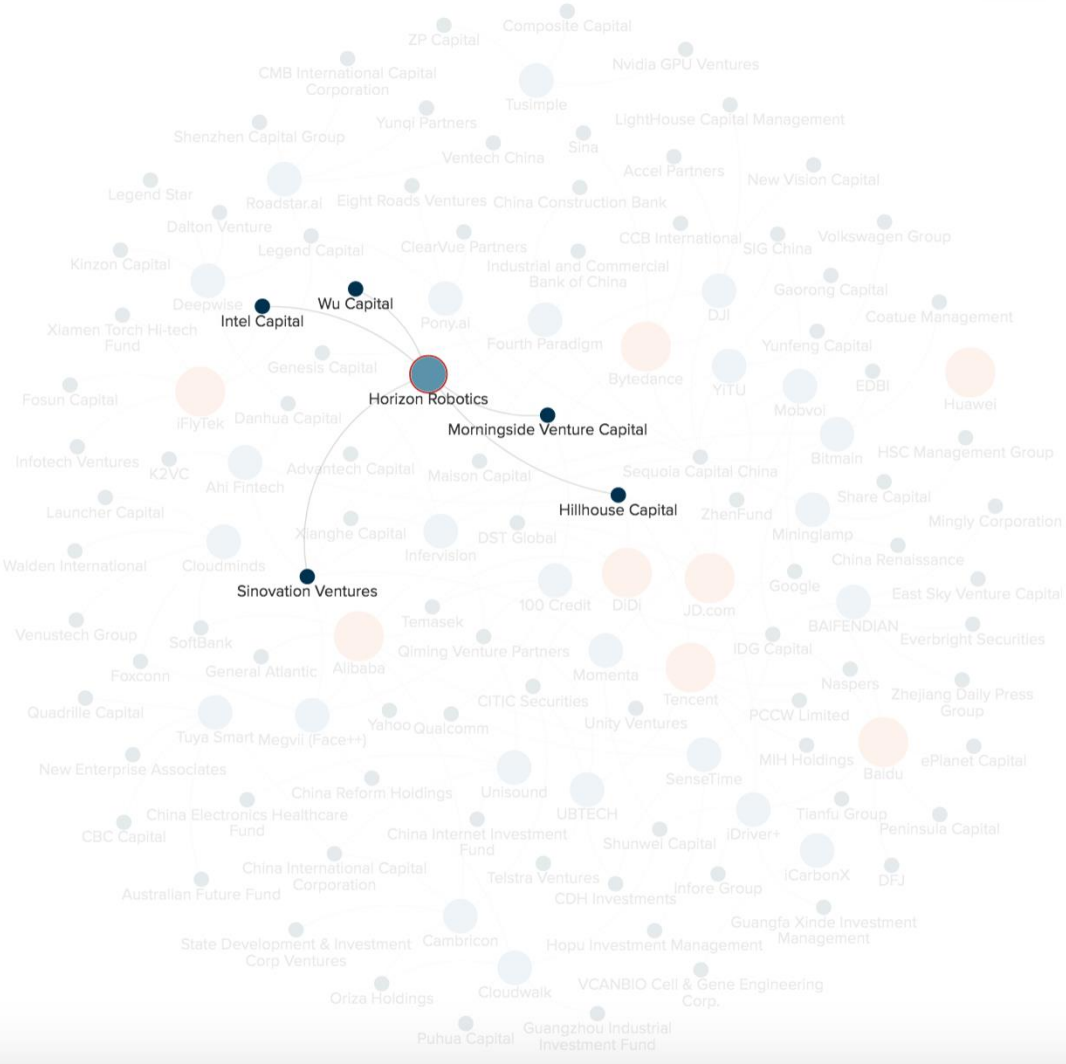
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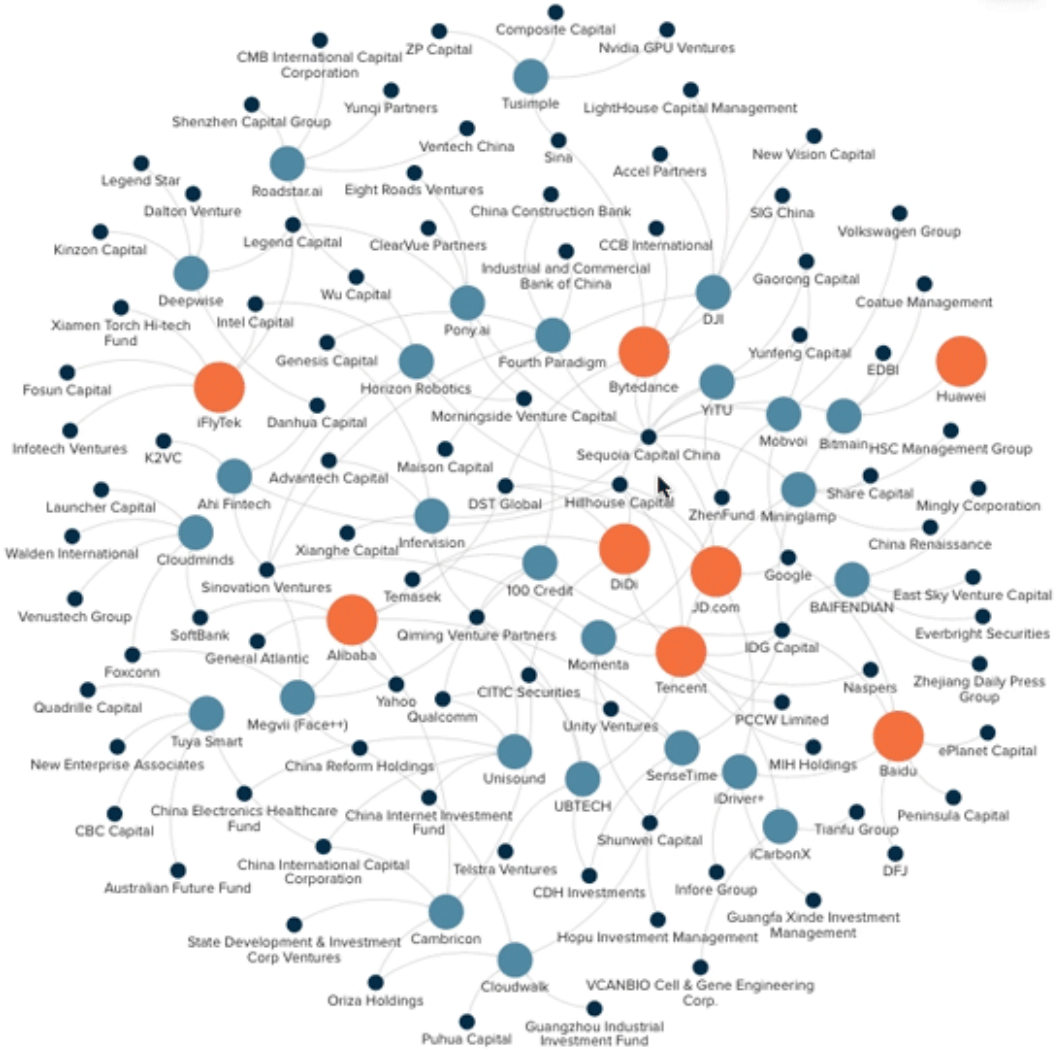
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The Plan

The Plan

How does China’s national AI plan actually work?

The Plan

National Goals,
Local Implementation

Subsidies
Surveillance
Infrastructure Adaptation
Education
+
−

Subsidies
Surveillance
Infrastructure Adaptation
Education
+
−

Takeaways

Data: *Weak in diversity, strong in depth*

Talent: many top researchers are Chinese, few work for Chinese companies

Companies: Rich ecosystem, but will the boom continue?

Plan: Many local applications, but can it generate research breakthroughs?

Questions going forward

Descriptive: ***What are the implications for talent flows and economic impacts in the US and China?***

Normative: ***How can the US and China avoid a dangerous arms race that creates powerful and unsafe AI systems?***

Explore more

macropolo.org/chinai

Big thanks to my teammates on ChinAI:

Joy Dantong Ma, Jeffrey Ding (ChinAI newsletter), Annie Cantara, and Chris Roche