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Dear Co-Chair Frederick, Co-Chair McLane and members of the Joint Ways and Means Subcommittee on Education,

In Oregon’s higher education system, please increase, with incentives if necessary, the number of students studying Mandarin, the number of students studying abroad in China, and the production of Mandarin dual language immersion teachers for the Oregon K-12 system.

Consider that Kai-Fu Lee argues in his book *AI Superpowers: China, Silicon Valley, and the New World Order*: (1) that China will lead an artificial intelligence revolution with productivity gains not seen since the Industrial Revolution, and (2) that AI could replace 38 percent of U.S. jobs by the early 2030s.

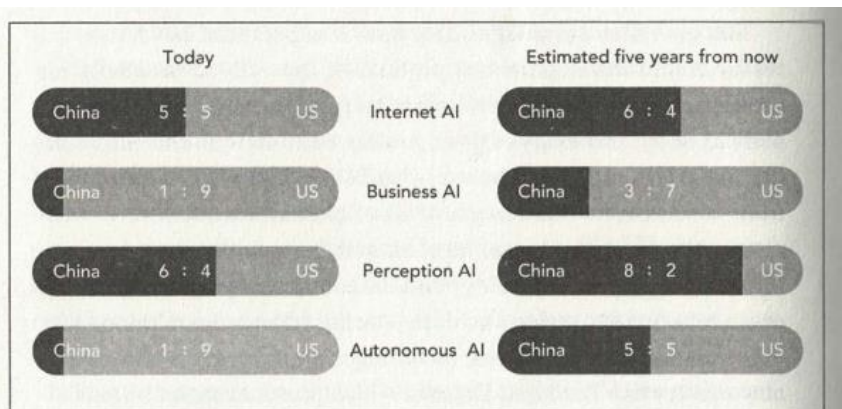
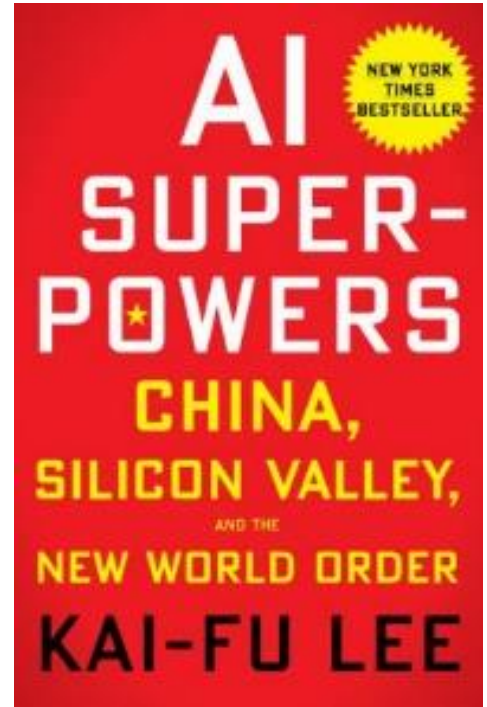
**(1) China will lead an artificial intelligence revolution with productivity gains not seen since the Industrial Revolution,**

From *AI Superpowers* (pages 14-15)

Harnessing the power of AI today – the “electricity” of the twenty-first century – requires four analogous inputs: abundant data, hungry entrepreneurs, AI scientists, and an AI-friendly policy environment. By looking at the relative strengths of China and the United States in these four categories, we can predict the emerging balance of power in the AI world order.

Both of the transition described on the previous pages – from discovery to implementation, and from expertise to data – now tilt the playing field toward China. They do this by minimizing China’s weaknesses and amplifying its strengths. Moving from discovery to implementation reduces one of China’s greatest weak points (outside-the-box approaches to research questions) and also leverages the country’s most significant strength: scrappy entrepreneurs with sharp instincts for building robust businesses. The transition from expertise to data has a similar benefit, downplaying the importance of the globally elite researchers that China lacks and maximizes the value of another key resource that China has in abundance, data.

Silicon Valley’s entrepreneurs have earned reputations some of



*The balance of capabilities between the United States and China across the four waves of AI, currently and estimated for five years in the future*

the hardest working in America, passionate young founders who pull all-nighters in a mad dash to get a product out, and then obsessively iterate that product while seeking out the next big thing. Entrepreneurs there do indeed work hard. But I've spent decades deeply embedded in both Silicon Valley and China's tech scene, working at Apple, Microsoft, and Google before incubating and investing in dozens of Chinese startups. I can tell you that Silicon Valley looks downright sluggish compared to its competitors across the Pacific.

China's successful internet entrepreneurs have risen to where they are by conquering the most cutthroat competitive environment on the planet. They live in a world where speed is essential, copying is accepted practice, and competitors will stop at nothing to win a new market. Every day spent in China's startup scene is a trial by fire, like a day spent in the Coliseum. The battles are like life or death, and your opponents have no scruples.



And: (page 18)

Putting all these pieces together – the dual transition into the age of implementation and the age of data, China's world class entrepreneurs and proactive government – **I believe that China will soon match or even overtake the United States in developing and deploying artificial intelligence. In my view, that lead in AI deployment will translate into productivity gains on a scale not seen since the Industrial Revolution.** ... As the economic balance of power tilts in China's favor, so too will political influence and "soft power," the country's cultural and ideological footprint around the world.

**(2) AI could replace 38 percent of U.S. jobs by the early 2030s. ( pages 158-161):**

A pair of researchers at Oxford University kicked things off 2013 with a paper making a dire prediction: 47 percent of U.S. jobs could be automated within the next decade or two....

Other economists struck back. In 2016, a trio of researchers at the Organization for Economic Cooperation and Development (OECD) used an alternative model to produce an estimate that seemed to directly contradict the Oxford study: just 9 percent of jobs in the United States were at high risk of automation....

In the years since the Oxford experts made their predictions, computer vision has now surpassed human capabilities and dramatically expanded real-world use-cases for the technology.

Those amped-up capabilities extend far beyond computer vision. New algorithms constantly set and surpass records in fields like speech recognition, machine reading, and machine translation. While these strengthened capabilities don't constitute fundamental breakthroughs in AI, they do open the eyes and spark the imagination of entrepreneurs. **Taken together, these technical advances and emerging uses cause me to land on the higher end of task-based estimates, namely PwC's prediction that 38 percent of U.S. jobs will be at high risk of automatability by the early 2030s.**

Thank you – Dave Porter