**Title: AI 數位時代，如何擴增能力?**

How to Enhance Your Capabilities in the AI Digital Era?

**Abstract**

**In 1880, New York City had at least 150,000 horses, producing over 100,000 tons of manure and 10 million gallons of horse urine annually. Crossing sweepers, who cleared walkable paths for pedestrians, were in short supply. However, within a few years, automobile technology rendered horses obsolete. By 1912, the number of cars in New York had surpassed that of horses, and the manure problem vanished. The crossing sweepers all lost their jobs. Are we the crossing sweepers of the AI era?**

**Everyone knows the basic principles behind LLMs (Large Language Models), but unlike teams like DeepSeek, we can't apply them as cleverly by harnessing data to significantly reduce the cost of reasoning. The DeepSeek team is both smart and diligent. They also have access to more computing power than Taiwan does. Can Taiwan afford not to catch up?**

**You shouldn't fear being replaced by AI itself—but rather by those who know how to wield it effectively. As artificial intelligence becomes more embedded in our lives, it's not just a technological shift; it's an evolutionary one. Humans are not simply being replaced—we're being reshaped. Our minds and bodies are adapting to collaborate with machines, to the point where the line between human and machine is increasingly blurred.**

**The real transformation lies in who adapts. Those who learn to work with AI will evolve, being pushed to focus on creative, strategic, and emotional labor that machines cannot replicate. Ironically, this might mean humans work even harder, not less, as described by the Jevons Paradox: greater efficiency leads to more, not less, effort. Meanwhile, those who fail to adapt, regardless of their raw intelligence, risk obsolescence, will become, in Keynesian terms, modern Neanderthals.**

**Instead of the dystopian fear that AI will eliminate all jobs, the likelier scenario is a divided world: one group thrives through close AI integration, while another becomes dependent, idle, or governed by algorithms they can't control. The challenge isn't to outcompete AI, but to evolve alongside it.**

**Yi-Bing Lin (jasonyblin@gmail.com)**

**CURRENT POSITION/INSTITUTION**

Winbond Chair Professor, NYCU
Chair Professor, China Medical University and Asia University
Chair Professor, Miin Wu School of Computing, National Cheng Kung University
Adjunct Research Fellow, Research Center for Information Technology Innovation, Academia Sinica.

**EDUCATION**

**Yi-Bing Lin** received his Bachelor's degree from National Cheng Kung University, Taiwan, in 1983, and his Ph.D. from the University of Washington, USA, in 1990.

**PROFESSIONAL EXPERIENCE**

From 1990 to 1995 Yi-Bing Lin was a Research Scientist with Bellcore (Telcordia). He then joined National Chiao Tung University (NCTU) in Taiwan, where he remains. In 2010, Lin became a lifetime Chair Professor of NCTU, and in 2011, the Senior Vice President of NCTU. During 2014 - 2016, Lin was Deputy Minister, Ministry of Science and Technology, Taiwan. Lin is the author of the books Wireless and Mobile Network Architecture (Wiley, 2001), Wireless and Mobile All-IP Networks (John Wiley,2005), and Charging for Mobile All-IP Telecommunications (Wiley, 2008). Lin is AAAS Fellow, AAIA Fellow, ACM Fellow, IEEE Fellow, and IET Fellow.

**Research Areas**

I am interested in collaborating on projects related to Smart Agriculture, Smart Hospitals, Interactive Artwork, and other specific topics in Smart City using the IoTtalk platform. These specific topics may include smart transportation, smart waste management, and more. Each research topic will have sustainable experimental fields in Taiwan, such as smart farms (with more than 10 sites already built), smart hospitals (in Taichung and Hsinchu), smart buildings (in NCKU, China Medical University Hospital in Taichung and Hsinchu), and interactive art (in NYCU, NCKU, AU, and other locations). For data collection, I will continuously unify the data formats, including smart healthcare (using FHIR), smart agriculture, intelligent buildings (using TAICS), and intelligent interactions (such as art and movement). The major advantage of IoTtalk is that it provides a sustainable platform for ABIoT (AI+ Big Data+IoT) to accommodate the research highlights of these projects. The research highlights can be transformed into reusable AIoT (Artificial Intelligence of Things) tools and open datasets.