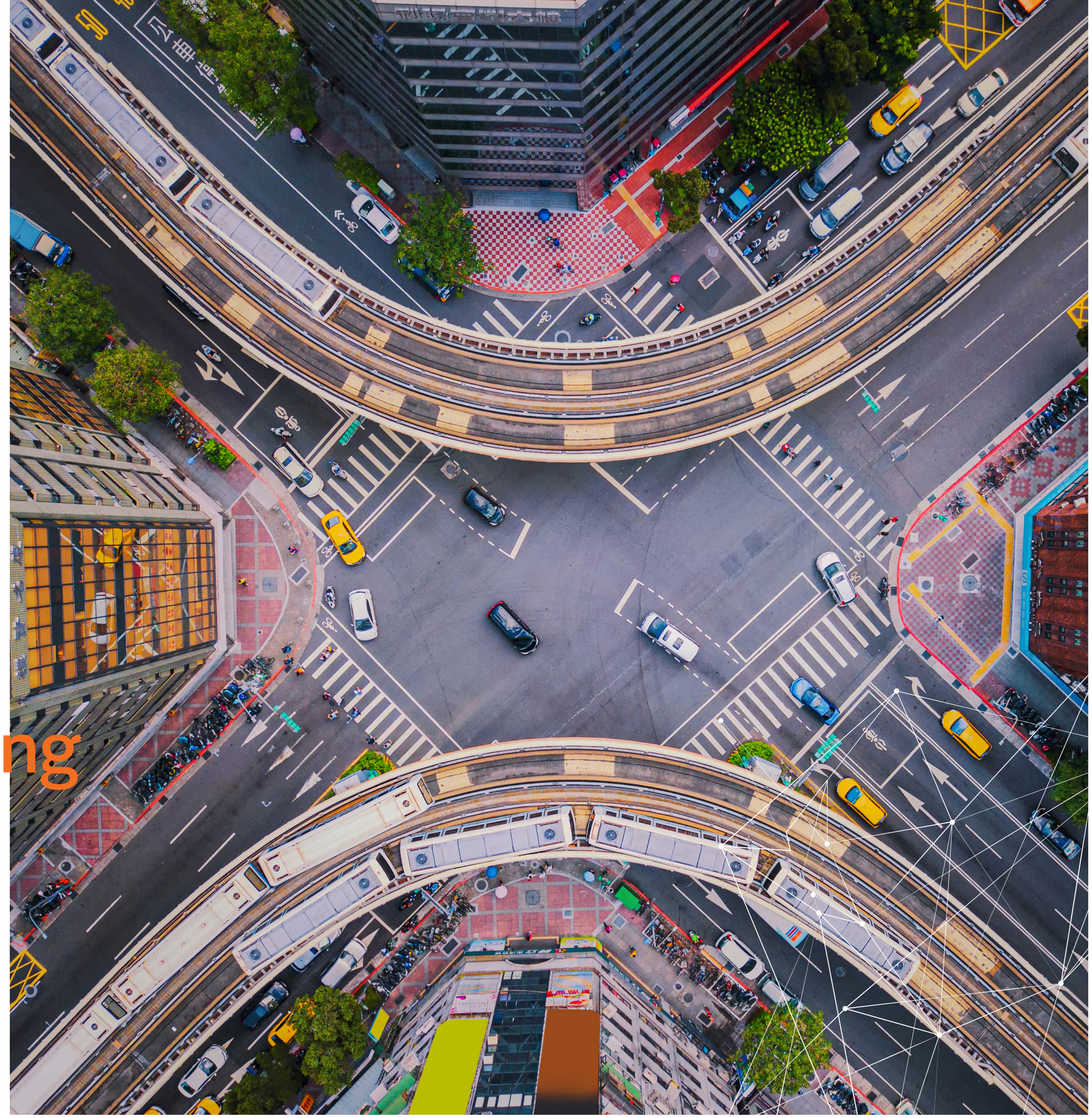
Taiwan: Strong foundations for a promising future

With strong technological foundations in ICT, semi-conductors and manufacturing, a healthy talent pool and well-funded government plans, Taiwan is well-positioned to flourish in AI development. In addition, its comprehensive transportation infrastructure and commitment to smart cities have made the country an Asian hub in the area of smart mobility.



TAIWAN

Government policies

In 2018, the government published a €1.1 billion 4-year AI Action Plan, on top of a €500 million 5-year AI Strategy laid out by the Ministry of Science & Technology (MoST) in 2017 (see Table X). A 'sandbox' bill was also passed that facilitates and encourages AV developments in the automotive industry by minimising bureaucracy and regulations.

PAIR Labs

One of the four MoST AI innovation research centres (see Table Y) focuses on AI technologies in daily applications (PAIR Labs), including advanced driver assistance systems and self-driving applications for mobility. Research focuses on areas such as automatic data labelling for deep learning applications, behaviour analysis algorithms for model development, and the development of a real-time computing platform.

Table X
AI Action Plan

AI for industrial innovation	Connect industry with AI solutions and enable AI-driven innovation in SMEs
AI International Innovation Hub	Foster 100 AI startups and develop international AI innovation clusters
AI Pilot projects	Launch AI research projects
AI Talent Programme	Cultivate, train and attract talent
Test field and Regulatory Co-Creation	Open fields and data for testing

Table Y
MoST AI Strategy

AI Cloud Platform	Develop an AI R&D platform for cloud services and high-speed computing
AI research centres	Establish 4 AI innovation research centres at universities, focused on health, manufacturing and day-to-day applications
AI robot makerspace	Develop test fields for AI robotics
Semiconductor programme	Focus on AI-powered edge computing
AI Grand Challenges	Competitions to stimulate AI innovations

Taiwanese universities rank consistently well on AI and turn out some 10,000 graduates a year in AI-relevant disciplines

Taiwan CAR Lab

The Taiwan CAR (Connected, Autonomous, Road-test) Lab is a €7.5 million test facility to encourage the development of AV technologies and services, and provides tests required for innovative experiments in the regulatory sandbox.

7StarLake

7StarLake specialises in AV public transportation. The locally manufactured EZ10 electric-powered AV shuttle bus has been tested across 2500 km in Taiwan, transporting over 14,000 passengers.

Multinationals in Taiwan

In recent years, IBM, Google, Microsoft and others have all opened AI R&D centres in Taiwan. Apart from subsidies from the Ministry of Economic Affairs, they chose Taiwan because of its easy access to software, hardware, talent, data and infrastructure.

Audi, for example, hold annual innovation awards for smart mobility in Taiwan. The winner gets to collaborate with Audi, who choose to drive their innovation in Taiwan because of the country's extensive transport infrastructure and the ease of doing tests.

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AI Talent

Taiwan has established a two-track AI Academy to train and prepare professionals for AI. The AI-specific track focuses on the computer science skills needed to develop AI further. The AI-domain knowledge track focuses on applying AI in specific domains.

Taiwanese universities score consistently well on AI rankings in Asia, and turn out some 10,000 graduates annually in computer science and information system management-related subjects.

The Netherlands Innovation Network in Taiwan is currently writing an extensive report on AI developments in the country, and specifically on AI in Health.