AI in STEM Education (Knowledge Exchange and Company Training)
AI in Robot Automation and Vision Workshop

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(https://dslab.saas.hku.hk)

Figure 1 : The "STEM AI in Robotic Starter" workshop for the Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College. In the first figure: Mr Benny Cheung and Bernie Kwok (the first two from the leftmost), Dr Adela Lau (the fifth from the leftmost), and Mr Chiang (the sixth from the leftmost)

Figure 2 Students implemented 4 robots with an automatic control module within a one-day workshop

"Kinth Technology (HK) Ltd is a company which aims at providing big data and AI solutions. We engage in promoting innovative technology and supporting our future generations and local companies in innovative applications," said Mr Benny Lam, CTO of the Kinth Technology (HK) Ltd.

In response to the changing needs in our society, the Education Bureau promoted a new education model, STEM, through Science, Technology, Engineering, and Mathematics to nurture the secondary school students' creativity, collaboration, problem solving skills, and entrepreneurial spirit in the 21st century. The Office of the Government Chief Information Officer (OGCIO) implemented the IT Innovation Lab for supporting the secondary schools to organise extra-curricular activities to deepen students' knowledge of cutting-edge IT, such as artificial intelligence, to build an IT foundation in their early ages, and to close the gaps of the secondary school's curriculum to the university one in terms of knowledge integration, innovation and practical.

The Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College is one of the schools which includes STEM education and IT innovations in her curriculum. The HKU SAAS Data Science Lab provided a one-day workshop to the school with Kinth Technology (HK) Ltd in 2021 in order to support the education bureau and the OGCIO's visions. They nurture the secondary school's students and teachers on developing the cutting-edge IT curriculum in their school. The workshop included the real practices of using AI in robot control. In the workshop, Dr Lau provided a lecture on the foundation of AI and the evolution of the AI robots. Kinth Technology (HK) Ltd taught students some hands-on practices such as implementing a physical robot, and writing an introductory program code for controlling the robot.

"To promote innovative technology such as AI, Data Science Lab provides workshops, company trainings, and seminars to our business and school partners for knowledge exchange and professional training development, and to foster their innovation and entrepreneurial spirit. In the coming years, we will have some AI in robotic programming workshops with HKUSPACE to promote the use of AI for robotic development, and to train more adult professionals and companies to have a better understanding of know-how and deployment of AI," said Dr Lau, Deputy Director of the HKU SAAS Data Science Lab.