



Humanoid Robot Technology Experiential Learning Programme

Highlights:

- ❖ Exploring the latest technological advancements and research breakthroughs. While gaining a comprehensive understanding of current trends and future directions in the AI and robotic field.
- ❖ Providing practical training using state-of-the-art humanoid robots through interactive sessions.
- ❖ Unlocking exciting career opportunities in robotics, and artificial intelligence.

Date	26 August 2025
Venue	HKPC Building, 78 Tat Chee Avenue, Kowloon
Language	English learning materials with Mandarin or Cantonese instruction
Course fee	HK\$ 1,000 per person Group discount: HK\$ 900 per person* Webinar Fee: HK\$ 300 per person
Registration Deadline	15 August 2025

Course Objective

This 4-session training program provides a comprehensive introduction to humanoid robot technology, offering both theoretical knowledge and practical experience. By the end of the course, participants will have the foundational skills to design and implement task-specific applications for humanoid robots, making them well-prepared for further implementation work in the field of robotics.



Course Outline

Time	Activities
09:00-09:20	Session 1: Overview of Humanoid Robot Development • Overview of humanoid robots: Definitions and characteristics • History and evolution of humanoid robots • Key components of humanoid robots • Applications of humanoid robots in industry and high-risk environments • Current challenges and opportunities in humanoid robotics
09:20-09:40	Session 2: Analysis of Core Technologies for Humanoid Robots • Principles of motion control: Biped gait planning, whole-body coordinated movement • Perception and decision-making systems: Environmental perception, task planning • Dexterous manipulation techniques: Hand grasping strategies, case studies on tactile force control
10:00-10:20	Session 3: Introduction to Humanoid Robot Hardware Composition and Operation • Introduction to technical specifications • Introduction to sensor equipment and development tools • Introduction to software frameworks and development tools • Introduction to basic operation and control of robots
10:35-12:35	Session 4: Practical Exercises (Exclusive for online participants only) • Familiarise with the humanoid robot hardware platform • Perform basic operation and control of the robot

Speaker Information

Dr. Gong Leiliang is currently a Senior Consultant at the Hong Kong Productivity Council, with over four years of professional experience in the fields of computer vision and intelligent robotics system development. He was awarded a PhD degree by the National University of Singapore in 2020 and has hosted or participated in multiple R&D projects. His current research focuses on intelligent robotic systems, imitation learning, and related areas.

Course Fee

Training Fee: HK\$ 1,000 per person

Group discount: HK\$ 900 per person*

Webinar Fee: HK\$ 300 per person

*Group enrolment of 2 people or above

Award of Certificate:

Upon successful completion of the program, participants will receive a Certificate of Completion.

Enrolment Method

By mail: The crossed cheque with payee name to "Hong Kong Productivity Council" (in HKD) and mail it together with the completed registration form to: Artificial Intelligence and Robotics Division, 5/F, Hong Kong Productivity Council Building, 78 Tat Chee Avenue, Kowloon, Hong Kong

(Attn: Ms. Poon/Ms. Li)



Scan code for registration

*HKPC reserves the right to replace the speaker and/ or change the contents, venue and/or time as may be necessary.

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人形機器人技術體驗式學習課程

課程亮點：

- ❖ 探索最新的技術進步和研究突破，全面了解該領域當前的趨勢和未來發展方向。
- ❖ 提供使用最先進人形機器人的實踐培訓機會。
- ❖ 開啟機器人技術和人工智能領域的職業發展道路。

日期	2025 年 8 月 26 日
地點	九龍達之路78號生產力大樓
語言	英語學習教材，配備普通話或粵語講解
課程費用	港幣\$ 1,000元/每位 團體優惠 港幣\$ 900元/每位* 線上研討會 港幣\$ 300元/每位
截止報名日期	2025 年 8 月 15 日

課程目標

這個為期一天的培訓課程，包含四節豐富內容，將全面涵蓋人形機器人技術的提供理論知識和實務經驗。課程結束時，參與者將掌握設計和實施人形機器人特定任務應用程式的基礎技能，為進一步在機器人領域開展相關工作做好充分準備。



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課程大綱

時間	內容
09:00-09:20	第一節 人形機器人基礎認知 涵蓋主題: • 人形機器人的概述：定義與特徵 • 人形機器人的歷史與演變 • 人形機器人的關鍵元件 • 人形機器人在工業、高危環境中的應用 • 人形機器人當前的挑戰與機遇
09:20-09:40	第二節 人形機器人核心技術解析 涵蓋主題: • 運動控制原理：雙足步態規劃、全身協調運動 • 感知與決策系統：環境感知、任務規劃 • 靈巧操作技術：手部抓取策略、觸覺力控案例解析
10:00-10:20	第三節 人形機器人硬件構成及操作入門 涵蓋主題: • 技術規格介紹 • 傳感器設備和開發工具介紹 • 軟件框架和開發工具介紹 • 機器人的基本操作和控制介紹
10:35-12:35	第四節 實踐活動 (只適用於現場參加者) • 熟悉人形機器人硬件平台 • 進行機器人的基本操作和控制

演講者資料

龔磊良博士，現任香港生產力促進局高級顧問，在計算機視覺及智能機器人系統開發領域擁有超過四年的專業經驗。他於2020年獲新加坡國立大學授予博士學位，曾主持或參與多項研發項目。當前的研究方向聚焦於智能機器人系統、模仿學習等。

課程費用

培訓費用: 港幣\$ 1,000 每位

團體優惠: 港幣\$ 900元 每位*

線上研討會 港幣\$ 300元/每位

*2人或以上同時報讀尊享優惠

證書頒發:

成功完成課程後，學員將獲頒 結業證書。

報名方法

郵寄支票：開立劃線支票（抬頭為「香港生產力促進局」，以港元支付），並將其與填妥的登記表格郵寄至：香港九龍達之路78號香港生產力促進局大樓5樓人工智能和機械人部（收件人：潘小姐/李小姐）



掃描二維碼報名

*生產力局保留在有需要的情況下更改講師及/或課程內容、授課地點、日期及/或時間的權利。

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