

AI and Quantum Research Center (AIQRC), Asia University, Taiwan

AIQRC proudly celebrates **the first anniversary of the AIQRC Newsletter**, marking one year since its launch on October 10, 2025.

Contents

- [1] Upcoming event – International Physical AI & Robotics Symposium**
- [2] Recent activities**
- [3] Quantum–AI-Assisted Horticulture approaches**

[1] Upcoming event, Dec. 3 – 4, 2026**About the Symposium**

AI is moving beyond chatbots and software — into robots, factories, vehicles, and autonomous systems that sense, reason, and act in the real world. This is Physical AI, and it represents the next great competitive frontier for enterprise technology.

Physical AI & Robotics Symposium 2026 brings together the pioneers building this future — engineers, researchers, and enterprise leaders working at the intersection of AI, robotics, and industrial automation. Over two days, attendees will explore how intelligent machines are reshaping manufacturing, healthcare, logistics, and human-machine collaboration, and what it truly takes to move Physical AI from experimentation

Click [here](#) for more details.



[2] Asia University and AIQRC, supported by the Ministry of Education's Taiwan Global Pathfinders Grant Program, provide Taiwan students with world-class experiential learning opportunities through programs in IBM quantum technologies, UCLA academic exchange, quantum finance, humanoid robotics, and astronaut mission training.



(A) IBM dream program

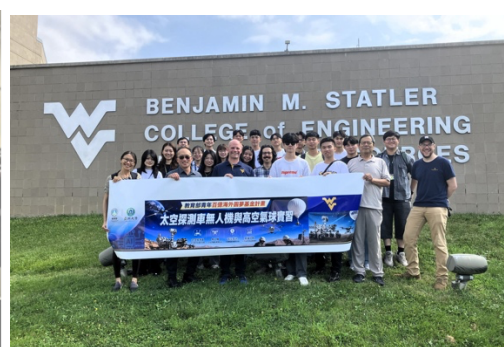
(B) UCLA elite program



(C) Quantum finance program



(D) Humanoid robot program



(E) Astronaut mission training program

Prepared and Edited by

Kuan-Tsae Huang^{1,2}, Ka-Lok Ng^{1,3}

Director¹ Deputy Director¹ & Distinguish Professor²

¹ [AI and Quantum Research Center \(AIQRC\)](#),

² [Department of Computer Science and Information Engineering](#), Asia University, Taiwan

³ [Department of Bioinformatics and Medical Engineering](#), Asia University, Taiwan

[3] Quantum–AI-Assisted Horticulture approaches

Across Asian countries, the cultivation of horticultural crops is a common practice. In Southeast Asia, especially on Indonesia's island of Java, a broad range of horticultural crops is grown to satisfy food requirements (Hong & Gruda, 2020). The tropical climate offers favorable conditions for cultivating diverse horticultural crops, thereby enhancing Indonesia's remarkable biodiversity.

We are developing quantum-AI-assisted technology to support the cultivation of a range of horticultural crops. In our agricultural research, we are investigating AI-based recognition and identification technologies. We have created preliminary models for several horticultural crops as an initial step toward applying this technology in agricultural settings.

We have created preliminary models for chili peppers and water spinach that form the basis for further development of our Quantum-AI-Assisted technology. For chili pepper identification, we employed several deep learning architectures, such as ResNet18 (Islam et al., 2026) and EfficientNetB0 (Arief et al., 2026). Our work on water spinach modeling was previously described in a news article.

Arief, L. A., Munawir, M., Zaenudin, E., Suwarningsih, W., & Kirana, R. (2026, 3-5 Sept. 2026). A Two-Phase Transfer Learning Approach for the Multiclass Classification of Capsicum Annuum. 2026 International Conference on Computer, Control, Informatics and its Applications (IC3INA),

Hong, J., & Gruda, N. S. J. H. (2020). The potential of introduction of Asian vegetables in Europe. 6(3), 38.

Islam, M. A., Nazera, S. F., Zaenudin, E., Suwarningsih, W., & Kirana, R. (2026, 3-5 Sept. 2026). Deep Ensemble Learning Identifies Chili Using Leaf Images. 2026 International Conference on Computer, Control, Informatics and its Applications (IC3INA),



Figure 1. Our Team (Dr. E. Zaenudin)

Prepared by
Dr. Efendi Zaenudin ^{1,2}
Junior Researcher
Email: efen004@brin.go.id; efendi.infomatika@gmail.com
Phone: +62(896)-4141-7553

Edited by
Ka-Lok Ng ^{1,3}
Distinguish Professor & Deputy Director

¹ [AI and Quantum Research Center \(AIQRC\)](#).

² Bioinformatics and Natural Product Lab., National Research and Innovation Agency Republic of Indonesia, Cisit, Bandung, Indonesia 40135

³ [Department of Bioinformatics and Medical Engineering](#), Asia University, Taiwan

AI and Quantum Research Center (AIQRC)
Room A110, Asia University, No. 500, LiuFeng Rd., WuFeng Dist., Taichung City 41354 Taiwan.
Email: qphys.qcomp@gmail.com Office: 04-23323456 ext. 6631
Web: <https://quantum.asia.edu.tw/>