2023 ASEAN TALENTED YOUNG SCIENTISTS PROGRAMME (ATYSP) OF GUANGXI

Artificial Intelligence (AI) Game Design and Development: Fashion Design on Practical Skills Mastery

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Associate Professor Ts Dr Tan Wee Hoe is the Deputy Director of the International Institute of Science Diplomacy and Sustainability at UCSI University, Malaysia. He also serves as an honorary lecturer at Universiti Sains Malaysia and an adjunct professor at UNITAR International University. Additionally, he has held the position of visiting professor at the Sichuan University of Culture and Art since April 2023.

A multimedia designer by profession, Dr Tan specialises in developing serious games for education and health. He is renowned for his inventive problem-solving and pioneering game designs utilising cardology, diceology, narratology, and ludology.

His creative works and research have earned numerous distinguished awards and fellowships. These honours include a Hubert H. Humphrey Fellowship from the U.S. Department of State at Pennsylvania State University, as well as a Visiting Research Scientist appointment at Yale University's Play2PREVENT Lab.

UCSI University proudly celebrates Assoc Prof Ts Dr Tan Wee Hoe's prestigious selection for the 2023 ASEAN Talented Young Scientist Programme (Guangxi) Award, known as ATYSP. This honour highlights the university's commitment to excellence in innovation and research.

The ATYSP, part of China's Belt and Road Initiative (BRI), cultivates leading scientists across ASEAN countries – choosing 100 promising researchers under 45 annually. Dr Tan's award marks outstanding contributions and regard within the scientific community.

His winning project - "AI Game Design: Fashion Design Mastery" - pioneers artificial intelligence intersections with game design for education. Co-led with PhD student Assoc Prof Huang Yanmei, it epitomises UCSI University's spirit of blending technology and pedagogy.

Key aspects of their AI game design exploration include:

- Content generation
- Non-player character behaviour

- Personalised player experience
- Player behaviour analysis
- Graphics and animation
- Voice and text interaction
- Testing and debugging

This project spotlights UCSI University's trailblazing approach to AI, presaging the institution's future shaping technology and design. Sincere congratulations to Assoc Prof Dr Tan Wee Hoe and Assoc Prof Huang Yanmei for their remarkable achievement. All of us at UCSI could not be prouder!

Figure 1: A sample AI-generated fashion design within this award-winning project