Bo-Hsu (Hentci) Ke

Education

National Yang Ming Chiao Tung University

Sept 2024 - Present

M.S. in Computer Science. Advisor: Wei-Chen Chiu. Co-Advisor: Yu-Lun Liu.

o Courses: Deep Learning, Data Visualization and Visual Analytics, Video Compression.

National Chung Cheng University

Sept 2020 - June 2024

B.S. in Computer Science. Advisor: Jian-Jhih Kuo.

o **GPA**: 4.08/4.3

Publications

3DGS Poisoning

Bo-Hsu Ke*, You-Zhe Xie, Yu-Lun Liu, Wei-Chen Chiu

Under Submission in ICCV 2025.

AuraFusion360: Augmented Unseen Region Alignment for Reference-based 360° Unbounded Scene Inpainting

Chung-Ho Wu*, Yang-Jung Chen*, Ying-Huan Chen, Jie-Ying Lee, **Bo-Hsu Ke**, Chun-Wei Tuan Mu, Yi-Chuan Huang, Chin-Yang Lin, Min-Hung Chen, Yen-Yu Lin, Yu-Lun Liu

IEEE/CVF Conference on Computer Vision and Pattern Recognition, (CVPR) 2025.

Feature Distraction Based Backdoor Defense for Federated Trained Intrusion Detection System

Yu-Wen Chen*, **Bo-Hsu Ke***, Yen-Xin Wang, Shih-Heng Lin, Ming-Han Tsai, Bo-Zhong Chen, Jian-Jhih Kuo, Ren-Hung Hwang *IEEE Global Communications Conference*, (GLOBECOM) 2024.

Knowledge Distillation Based Defense for Audio Trigger Backdoor in Federated Learning

Yu-Wen Chen*, **Bo-Hsu Ke***, Bo-Zhong Chen*, Si-Rong Chiu, Chun-Wei Tu, Jian-Jhih Kuo

IEEE Global Communications Conference, (GLOBECOM) 2023.

Successive Interference Cancellation Based Defense for Trigger Backdoor in Federated Learning

Yu-Wen Chen*, Bo-Hsu Ke*, Bo-Zhong Chen*, Si-Rong Chiu, Chun-Wei Tu, Jian-Jhih Kuo

IEEE International Conference on Communications, (ICC) 2023.

*: equal contribution.

Experiences

Backend Developer

June 2021 - Apr 2023

Munative

- Developed the backend for Munative, a Web APP designed for Model United Nations activities, using TypeScript, Node.js, GraphQL API, and MongoDB.
- Implemented Domain-Driven Design principles to ensure flexibility and handle complex use cases in the backend architecture.

Projects

3D-Aware Restoration via Diffusion Models and Vision Mamba

July 2024 - Aug 2024

Evaluating the effectiveness of various methods (Restormer, fine-tuned diffusion model, and Vision Mamba) in mitigating simulated image artifacts to enhance NeRF and 3DGS performance in novel view synthesis.

Liver Saving Bot: Automated Script for Web-Based Games

Oct 2021 - June 2024

Liver Saving Bot is a fully automated script for *Granblue Fantasy*, developed over three years to alleviate the game's time-consuming nature, leveraging my web and script development experience.

Awards

- \circ Bronze Award of The 2022 ICPC Asia Taoyuan Regional Programming Contest
- o Bronze Award of The 2023 ICPC Asia Taoyuan Regional Programming Contest
- o Silver Award of The 2023 ICPC Asia Taiwan Online Programming Contest
- President's Award in 2023 Spring Semester (Top 1% in the class)
- College Student Research Scholarship, National Science and Technology Council, Taiwan (collaborate with Bo-Zhong Chen, 2023)

Programming Skills

Languages: C/C++, Python, JavaScript, TypeScript

Tools: Git, Docker, Linux, Shell Script, PyTorch, TensorFlow, Latex, MongoDB, GraphQL, NerfStudio