

Kuan-Ru (Randy) Huang

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EDUCATION

Texas A&M University

MS in Computer Science

- GPA: 3.67/4.0

College Station, TX

Agu. 2024 – June 2026(Expected)

National University of Kaohsiung (NUK)

BBA in Information Management

- GPA: 3.29/4.0 | Last 60 credits: 3.54/4.0

Kaohsiung, Taiwan

Sep. 2020 – June 2024

PUBLICATION

Huei-Jiun Yang, **Kuan-Ru Huang**, Sheng-Po Wang, Ching-Chieh Lin, Chun-Lung Lin (ITRI), "[VCM][CE4-Related] The simplification of temporal up-sampling method," ISO/IEC JTC 1/SC 29/WG 4 m65098, Oct. 2023, Hannover
A modification related to the temporal up-sampling method to simplify the interpolation procedure by skipping SSIM calculation and subsequent condition selection. This proposed method shows no substantial performance change in the average BD-rate under the All-Intra, Random Access, and Low Delay test conditions.

WORK EXPERIENCE

Information and Communications Research Lab., Industrial Technology Research Institute

Hsinchu, Taiwan

Part-time Intern (20 Hours/week) | Advisor: Dr. Chun-Lung Lin

Feb. 2024 – June 2024

- Researched and introduced over 20 papers related to attention mechanism, channel pruning, quantization and entropy coding, proposing feasible mechanisms to meet team's needs
- Implemented SENet experiments from Github, presented the structure and evaluation of the mechanism

The Department of Information Management, NUK

Kaohsiung, Taiwan

Teaching Assistant | Advisor: Dr. Chia-Chi Chang

Feb. 2024 – June 2024

- Set up necessary material for class, grading assignments and tests, tracking student attendance

The Department of Information Management, NUK

Kaohsiung, Taiwan

Research Assistant (50 hours/month) | Advisor: Dr. Chia-Chi Chang

Apr. 2023 – June 2024

- Developed functions in R for computing indicators such as similarity, HHI, and originality as well as citation/referencing status of company patents for evaluating company development
- Organized data for multiple patent holders and verified their accuracy manually

Information and Communications Research Lab., Industrial Technology Research Institute

Hsinchu, Taiwan

Full-time Intern | Advisor: Dr. Chun-Lung Lin

July 2023 – Sep. 2023

- Researched high-efficiency video coding machines, contributing to MPEG-4 (an ISO/IEC working group)
- Designed experiments to improve mAP, which evaluates object detection algorithms based on video frames, by identifying objects' moving rate in each pair of frames with aim of adjusting the interpolation pattern accordingly
- Scripted process of managing 15 DELL servers and building simulation environments within the Linux domain

GRADUATION PROJECT

Emotion Recording Application-an app recording emotion manually and automatically with a dynamic web crawler, providing periodic emotion flow reports | Advisor: Dr. Hsin-Chang Yang

Feb. 2023 – Nov. 2023

- Awarded a Research Grant for University Students (1500 USD) by the National Science and Technology Council
- Preprocessed sentences by eliminating emotionless words and symbols by using the CKIP Transformer model; built a model, which ultimately has an accuracy rate of 83%, precision rate of 85% and recall rate of 80%; quantified emotions from social media and chat conversations by retraining and fine-tuning SnowNLP for more precise Mandarin comprehension
- Managed a five-member team, developed a project schedule, and supervised their efforts

HONOR & ACTIVITIES

Intra-department OOP Project Competition: Second Place, Apr. 2021 – June 2021

- Utilized JAVA to design the multitasking process of an adapted single-player board game and implement the logic of non-player characters

GSS AI Chatbot Hackathon, Galaxy Software Services, July 2023 – Aug. 2023

- Created an AI chatbot to share information about campus activities using Line Bot

SKILLS & CERTIFICATE

SAS Certified Specialist: Machine Learning Using SAS Viya 3.5, SAS, June 2023

Languages: Mandarin (native), English (fluent)