Sheng-Yang Chiu

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EDUCATION

2027 (expected)	**Simon Fraser University**, Burnaby, BC, Canada *Ph.D., Computing Science* Advisor: Xing-Dong Yang Research Fields: Human-Computer Interaction
2022	**National Chiao Tung University**, Hsinchu City, Taiwan *M.S., Artificial Intelligence* Advisors: Yu-Chee Tseng and Jen-Jee Chen Thesis: Low-Resolution Thermal Sensor-Guided Image Synthesis
2019	**Yuan Ze University**, Taoyuan City, Taiwan *B.S., Information Communication* Advisor: Wen-Pinn Fang Graduation Project: Fluid Display "Inverted Tinge", an array of submerged custom-built motorized ink nozzles to form graphics in the water.

PUBLICATIONS

ICRA 2023	**Sheng-Yang Chiu***, Yu-Ting Huang*, Chieh-Ting Lin*, Yu-Chee Tseng, Jen-Jee Chen, Meng-Hsuan Tu, Bo-Chen Tung, and YuJou Nieh, "**Privacy-Preserving Video Conferencing via Thermal-Generative Images**", *IEEE International Conference on Robotics and Automation*, 2023.
WACV-W 2023	**Sheng-Yang Chiu**, Yu-Chee Tseng, and Jen-Jee Chen, "**Low-Resolution Thermal Sensor-Guided Image Synthesis**", *Workshop on Real-World Surveillance: Applications and Challenges in conjunction with IEEE/CVF Winter Conference on Applications of Computer Vision, 2023.*
ECICE 2021	Sheng-Ya Chiu, **Sheng-Yang Chiu**, Yu-Ju Tu, and Chi-I Hsu, "**Gesture-based Intention Prediction for Automatic Door Opening using Low-Resolution Thermal Sensors: A U-Net-based Deep Learning Approach**", *Eurasia Conference on IOT, Communication and Engineering*, 2021.
ASAP 2019	Wenpei Zheng, **Shen-Yang Chiu**, Jui-Chien Hsieh, and Chaochang Chiu, "**Smart Rabbit - A Wearable Device As Intelligent Pacer for Marathon Runners**", *IEEE International Conference on Application Specific Systems, Architectures and Processors*, 2019.
ICSSE 2018	**Sheng-Yang Chiu**, Jui-Chien Hsieh, Chi-I Hsu, and Chaochang Chiu, "**A Convolutional Neural Networks Approach with Infrared Array Sensor for Bed-Exit Detection**", *International Conference on System Science and Engineering*, 2018.

EXPERIENCE

2020-2021	**College of Artificial Intelligence, National Chiao Tung University,** Taiwan *Research Assistant* - Developed Intelligent Faults Diagnosis Models for Electric Motors. - Worked on Target Detection and Tracking System for UAV Fleet.
2018	**Industrial Technology Research Institute**, Hsinchu County, Taiwan *Internship* - Accepted competitively (19%) through DIGI+Talent program held by Ministry of Economic Affairs, Taiwan. - Assisted the development of lip recognition model for Mandarin speech.

SELECTED PROJECTS

2025	Crowdsourced Agent to Facilitate Community Participation and Knowledge Learning (LLM Agent Simulation, GIS Stack, Interaction Design) (Ongoing)
2024	Emotion-Aware Chatbot with Real-time Emotion Recognition (Best Poster CMPT 724)
2023	Racoon: Relevant Answering Chatbot with Preprocessing and Associating Intelligence
2020	AI-Powered Interactive Trampoline
2020	Low-Resolution Heatmap Segmentation based on Thermopile Array Sensor
2017	Auto Design Tool for Heavy-Duty Metal Packaging Optimization

AWARDS

2025	Ebco Eppich Scholarships
2023-25	PhD Research Scholarship, Graduate Fellowship (Simon Fraser University)
2018	Undergraduate Research Fellowship (NSTC Taiwan)
2018	Adobe Design Achievement Awards Semifinal - Kinetic Sculpture "Whale Fall"
2018	The 4th China Mobile Internet Innovation Contest 2nd Prize - Smart Rabbit

OTHER

TA	CMPT 863 Advanced Topics in HCI (Fall & Spring 2024)
	CMPT 745 Special Topics in Software Engineering (Summer 2025)
Reviewer	UIST 2025
	CVPR 2023