Wei-Ting Chen

Ph.D. Candidate of Electronic Engineering,
National Taiwan University, Taiwan
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EDUCATION

National Chiao Tung University Hsinchu, Taiwan
- Bachelor of Electrical Computer Engineering Sep 2012-Jul 2016
- Overall GPA: **3.8**/4.0

Chalmers University of Technology Götheborg, Sweden
- Bachelor of Electronic Engineering Feb 2016-Jun 2016
- Visiting and exchange student with scholarship

National Taiwan University Taipei, Taiwan
- Ph.D. of Electronic Engineering Sep 2016-Present
- Overall GPA: **4.23**/4.3

PUBLICATION

- **Wei-Ting Chen,** Hao-Yu Feng, Cheng-Lin Hsieh, Cheng-Che Tsai, I-Hsiang Chan, Jian-Jiun Ding, and Sy-Yen Kuo, "ALL Snow Removed: Single Image Desnowing Algorithm Using Hierarchical Dual-tree Complex Wavelet Representation and Contradict Channel Loss", *International Conference on Computer Vision (ICCV)*, Oct., 2021.
- **Wei-Ting Chen**, Hao-Yu Feng, Jian-Jiun Ding, Cheng-Che Tsai, Sy-Yen Kuo, "JSTASR: Joint Size and Transparency-Aware Snow Removal Algorithm Based on Modified Partial Convolution and Veiling Effect Removal", *European Conference on Computer Vision (ECCV), 2020* (Accepted)
- **Wei-Ting Chen**, Jian-Jiun Ding, Sy-Yen Kuo, "PMS-Net: Robust Haze Removal Based on Patch Map for Single Images", *IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)*, *2019* (Accepted)
- **Wei-Ting Chen**, Hao-Yu Feng, Jian-Jiun Ding, Sy-Yen Kuo, "PMHLD: Patch Map Based Hybrid Learning DehazeNet for Single Image Haze Removal", *IEEE Trans. Image Processing* (Accepted)
- **Wei-Ting Chen**, Shih-Yi Yuan, Gui-Cheng Tsai, Hui-Chih Wang, Sy-Yen Kuo, "Color Channel-Based Smoke Removal Algorithm Using Machine Learning for Static Images", *IEEE International Conference on Image Processing (ICIP), 2018* (Accepted)
- **Wei-Ting Chen**, Hao-Yu Feng, Cheng-Che Tsai, Jian-Jiun Ding, and Sy-Yen Kuo, "All Characteristics Preservation: Single Image Dehazing based on Hierarchical Detail Reconstruction Wavelet Decomposition Network", *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Sep.,2021. (Accepted)
- **Wei-Ting Chen**, Hao-Lun Lou, Hao-Yu Fang, I-Hsiang Chen, Yi-Wen Chen, Jian-Jiun Ding, and Sy-Yen Kuo, "DesmokeNet: A Two-stage Smoke Removal Pipeline Based on Self-Attentive Feature Consensus and Multi-Level Contrastive Regularization", *IEEE Trans. Circuits and Systems for Video Technology*. (Accepted)

- Gui-Cheng Tsai, **Wei-Ting Chen**, Shih-Yi Yuan, Sy-Yen Kuo, "Efficient Reflection Removal Algorithm for Single Image by Pixel Compensation and Detail Reconstruction", *IEEE International Conference on Digital Signal Processing (DSP), 2018* (Accepted)
- Hao-Hsiang Yang*****, **Wei-Ting Chen***, Hao-Lun Luo, and Sy-Yen Kuo, "Multi-modal Bifurcated Network for depth guided image relighting", *IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW)*, June., 2021. (Accepted) (* Indicates equal contribution.)
- Hao-Hsiang Yang, Kuan-Chih Huang, and **Wei-Ting Chen**, "LAFFNet: A Lightweight Adaptive Feature Fusion Network for Underwater Image Enhancement", *IEEE International Conference on Robotics and Automation (ICRA)*, May., 2021. (Accepted)
- Hao-Hsiang Yang*****, **Wei-Ting Chen***, and Sy-Yen Kuo, "S3Net: A Single Stream Structure for Depth Guided Image Relighting", *IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW)*, June., 2021. (Accepted) (* Indicates equal contribution.)
- Hao-Hsiang Yang, Kuan-Chih Huang, **Wei-Ting Chen**, and Sy-Yen Kuo, "LRG-Net: Lightweight Residual Grid Network for Modeling Electrical Induction Motor Dynamics", *European Signal Processing Conference (EUSIPCO)*, Aug. 2021. (Accepted)
- Kuan-Chih Huang, Hao-Hsiang Yang, and **Wei-Ting Chen**, "Multi-Scale Aggregation with Self-Attention Network for Modeling Electrical Motor Dynamics", *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Sep., 2021. (Accepted)

RESEARCH EXPERIENCE

Dependable Distributed System and Networks Lab Sep 2016-Present
National Taiwan University
- Research Topic: Image Restoration, Image Identification Based on Machine Learning and Deep Learning, Computer Vision, Image Processing, Fault Tolerance Mechanism on Internet of Things
- Advisor: Sy-Yen Kuo

Sensational Multimedia Lab Jan 2015-Jan 2016
National Chiao Tung University
- Research Topic: A Melanin Evaluation and Blood Pressure Application based on the CMOS Photoplethysmography (PPG) System on a Chip
- Advisor: Sheng-Chieh Huang

Biomedical Optical Neural Lab Sep 2014-Jan 2016
National Chiao Tung University
- Research Topic: Diffused-aided frequency-domain diffuse optical imaging for brain
- Advisor: Ching-Cheng Chuang

HORNORS

NTIRE 2021 image challenges at CVPR 2021 June 2021
- **1st** position in the Depth Guided Image Relighting Track I.
- **3rd** position in the Depth Guided Image Relighting Track II.

ASUS AICS Ph.D Program Fellowship Sep 2020-Present
- Outstanding student in artificial intelligence

National Chiao Tung University Academic Award Sep 2014-Sep 2015

- Awarded to students ranking top 1% in the department

College Student Research Scholarship, NSC Mar 2015-May 2016

- Scholarship for excellent students based on my written research proposal

Pan Wen Yuan Foundation Scholarship Nov 2015-Nov 2016

- Outstanding academic performance

Nova-Tek Scholarship Sep 2018-Sep 2019

- Outstanding academic performance

WORK EXPERIENCE

ASUS Intelligent Cloud Services. Taipei, Taiwan

- Ph.D. Researcher in Computer Vision Team Sep 2020-Present

MediaTek Inc. Hsinchu, Taiwan

- Summer Internship in department of Communication System Development Jul 2017-Sep 2017

Teaching Assistant National Taiwan University

- Discrete Mathematics Feb 2018-Jun 2018
- Time Frequency Analysis and Wavelet Transforms Sep 2018-Jan 2019
- Discrete Mathematics Feb 2019-Jun 2019
- Time Frequency Analysis and Wavelet Transforms Sep 2019-Jan 2020
- Advanced Digital Signal Processing Mar 2020-Jun 2020

SKILLS&LANGUAGE

Programming: C++ / C / Java / Matlab / Python / Keras / Pytorch
Language: IELTS Overall 6.5, TOFEL iBT 94
Selected Skill: Machine Learning and Having it Deep Structured, Deep Learning for Computer Vision, Digital Visual Effects, Digital Speech Processing, Advanced Digital Signal Processing, Time-Frequency Analysis and Wavelet Transform and Algorithm Design.