Chi-Jui (Jerry) Ho

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EDUCATION

University of California San Diego (UCSD) — **San Diego, USA**
Ph.D. in Electrical and Computer Engineering — *Sep. 2020 -*
GPA: 3.90/4.00

National Taiwan University (NTU) — **Taipei, Taiwan**
B.S. in Electrical Engineering — *Sep. 2015 - Jun. 2019*
GPA: 3.88/4.30

PUBLICATIONS

- C.-J. Ho, S. Duong, Y. Wang, C. Nguyen, B.Bui, S. Truong, T. Nguyen, and C. An, "An Unsupervised Learning Approach to 3D Rectal MRI Volume Registration," in *IEEE Access*, vol. 10, pp. 87650-87660, 2022, doi: 10.1109/ACCESS.2022.3199379.
- C.-J. Ho, M. Valentine, W. Xiong, and N. Antipa, "Compressed Sensing of 2D IR Using Spectroscopic Models," in *International Conference on Coherent Multidimensional Spectroscopy*, 2022.
- C.-J. Ho, Y. Wang, J. Zhang, T. Nguyen, and C. An, "A Convolutional Neural Network Pipeline for Multi-Temporal Retinal Image Registration," in *International SoC Design Conference*, 2021.
- C.-J. Ho, M. Calderon-Delgado, M.-Y. Lin, J.-W. Tjiu, S.-L. Huang, and H. H. Chen, "Classification of Squamous Cell Carcinoma from FF-OCT Images: Data Selection and Progressive Model Construction," in *Computerized Medical Imaging and Graphics* 93 (2021): 101992.
- C.-J. Ho, M. Calderon-Delgado, C.-C. Chan, M.-Y. Lin, J.-W. Tjiu, S.-L. Huang, and H. H. Chen, "Detecting mouse squamous cell carcinoma from submicron full-field optical coherence tomography images by deep learning," in *Journal of Biophotonics*, 2020.
- C.-J. Ho, C.-C. Chan, and H. H. Chen, "AF-Net: A Convolutional Neural Network Approach to Phase Detection Autofocus," in *IEEE Transactions on Image Processing*, vol. 29, pp. 6386-6395, 2020.
- C.-J. Ho and H. H. Chen, "On the Distinction between Phase images and Two-View Light Field for PDAF of Mobile Imaging," in *Electronic Imaging*, 2020.

RESEARCH EXPERIENCE

Computational Imaging Lab, UCSD — **San Diego, USA**
Graduate Student Researcher (advior: Nick Antipa) — *Sep. 2020 -*

- Incorporate differentiable rendering and Luneberg-Kline wave approximation
- Apply compressed sensing to spectroscopic reconstruction

Video Processing Lab, UCSD — **San Diego, USA**
Graduate Student Researcher (advisor: Truong Q. Nguyen) — *Sep. 2020 - Mar. 2022*

- Proposed an unsupervised learning image registration model to align rectal data on 3D magnetic resonance imaging

Multimedia Processing and Communications Lab, NTU — **Taipei, Taiwan**
Research Assistant (advised by Homer H. Chen) — *Sep. 2017 - Mar. 2020*

- Developed a classifier to identify clinical stage of optical coherence tomography imaging
- Proposed a deep learning based approach to phase detection autofocus to enhance the robustness to noise [Demo Video]

ACADEMIC SERVICE

Teaching Assistant **Taipei, Taiwan**
EE1006: Cornerstone EECS Design and Development *2018 Spring and 2019 Spring*

Journal Reviewer
IEEE Access *2021*

HONORS & AWARDS

- Electrical and Computer Engineering Department Fellowship, UCSD, Oct. 2020 - Jul. 2021
- 1st prize in NTUEE Undergraduate Innovation Award, NTU, Sep. 2019
- College Student Research Creativity Award, MOST, Taiwan, Sep. 2019
- College Student Research Scholarship, MOST, Taiwan, Jul. 2018 - Apr. 2019

KEY SKILLS

Programming Language	Python, C++, Verilog, Matlab, Latex
Frameworks	Pytorch, OpenCV
Natural Language	Chinese (native speaker), English (fluent)