Cheng-Hao Tu

Website: andytu28.github.io
Email: andytu455176@gmail.com
GitHub: github.com/andytu28

Education

The Ohio State University
Ph.D. in Department of Computer Science and Engineering 2021–Present

National Taiwan University
M.Sc. in Department of Computer Science & Information Engineering 2015–2018

– GPA: 3.97/4.30, Rank: 60/152

National Taiwan University
B.Sc. in Department of Computer Science & Information Engineering 2011–2015

– GPA: 4.02/4.30, Rank: 7/111

Professional Experience

AINTU, National Taiwan University
Research Associate Jan. 2021 –Aug. 2021

Institute of Information Science, Academia Sinica
Research Assistant Apr. 2019 –Dec. 2020

NTU IoX Center, National Taiwan University
System Administrator July 2016 –Feb. 2017

– Maintaining IoX center website, and troubleshooting personal computers.

Publications

* indicates equal contributions

[1] **C.-H. Tu***, H.-Y. Chen*, D. Carlyn, and W.-L. Chao, "Learning fractals by gradient descent", in *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2023.

[2] H.-F. Yang, **C.-H. Tu**, and C.-S. Chen, "Learning binary hash codes based on adaptable label representations", *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, vol. 33, no. 11, pp. 6961–6975, 2022.

[3] **C.-H. Tu**, H.-F. Yang, S.-M. Yang, M.-C. Yeh, and C.-S. Chen, "Semantichash: Hash coding via semantics-guided label prototype learning", *IEEE Transactions on Artificial Intelligence (TAI)*, vol. 2, no. 1, pp. 42–57, 2021.

[4] **C.-H. Tu**, J.-H. Lee, Y.-M. Chan, and C.-S. Chen, "Pruning depthwise separable convolutions for mobilenet compression", in *IEEE International Joint Conference on Neural Networks (IJCNN)*, 2020, pp. 1–8.

[5] **C.-H. Tu**, C.-E. Wu, and C.-S. Chen, "Extending conditional convolution structures for enhancing multitasking continual learning", in *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, 2020, pp. 1605–1610.

[6] S. C.-Y. Hung, **C.-H. Tu**, C.-E. Wu, C.-H. Chen, Y.-M. Chan, and C.-S. Chen, "Compacting, picking and growing for unforgetting continual learning", in *Advances in Neural Information Processing Systems (NeurIPS)*, 2019, pp. 13 669–13 679.

[7] **C.-H. Tu**, C.-Y. Yang, and J. Y.-j. Hsu, "Idennet: Identity-aware facial action unit detection", in *IEEE International Conference on Automatic Face & Gesture Recognition (FG)*, 2019, pp. 1–8.

[8] H.-F. Yang, **C.-H. Tu**, and C.-S. Chen, "Adaptive labeling for deep learning to hash", in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*, 2019.

[9] H.-F. Yang, **C.-H. Tu**, and C.-S. Chen, "Adaptive labeling for hash code learning via neural networks", in *IEEE International Conference on Image Processing (ICIP)*, 2019, pp. 2244–2248.

[10] H.-F. Yang, T.-Y. Chen, **C.-H. Tu**, and C.-S. Chen, "Equivalent scanning network of unpadded cnns", *IEEE Signal Processing Letters*, vol. 25, no. 10, pp. 1590–1594, 2018.

Awards

- University Fellowship, Ohio State University 2021
- The Presidential Award (5%), National Taiwan University Fall 2013
- The Presidential Award (5%), National Taiwan University Fall 2012

Certificate

- Reviewer in Pattern Recognition, ELSEVIER 2020

Invited Talks

- **Compacting, Picking and Growing for Unforgetting Continual Learning** December 2020
  AI Forum 2020 at Howard Civil Service International House, Taipei, Taiwan

Skills

- **Programming Languages:** C/C++, Python
- **Frameworks:** PyTorch, Tensorflow

Teaching

- **Teaching Assistant** at National Taiwan University Fall 2017
  Course: Introduction to Digital Signal Processing