

# CHENG-EN WU

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CONTACT INFORMATION	1415 Engineering Dr Madison, WI 53706	Email: <a href="mailto:cwu356@wisc.edu">cwu356@wisc.edu</a> Webpage: <a href="https://cewu.github.io">https://cewu.github.io</a>
EDUCATION	<b>University of Wisconsin-Madison</b> Ph.D. student in Electrical and Computer Engineering	Fall 2020 – Present
	<b>National Tsing Hua University</b> M.S. in Computer Science Advised by Prof. Jia-Shung Wang	2014 – 2016
	<b>National Taiwan University of Science and Technology</b> B.S. in Electrical and Computer Engineering	2009 – 2012
WORK EXPERIENCE	<b>UW-Madison</b> , Madison, WI <i>Research Assistant</i> Collaborated with Prof. Yu Hen Hu on block pruning methods for Convolutional Neural Networks.	Spring 2022 – Present
	<b>TikTok</b> , San Jose, CA <i>Research Intern</i> Collaborated with Yu Tian, Linjie Yang, Haichao Yu and Heng Wang on prompt tuning for Vision-Language Pre-trained Models.	Summer 2022
	<b>NEC Labs America</b> , Princeton, NJ <i>Research Intern</i> Collaborated with Farlay Lai and Asim Kadav on self-supervised video representation learning.	Summer 2021
	<b>Academia Sinica</b> , Taipei, Taiwan <i>Research Assistant</i> Collaborated with Chu-Song Chen on unforgetting continual learning in ConvNets and efficient visual recognition with deep neural networks.	2018 – 2020
	<b>MediaTek</b> , Hsinchu, Taiwan <i>Software Engineer</i> Improved the computational efficiency of neural networks on mobile devices and developed mobile GPU drivers to boost run-time of applications using neural networks.	2017 – 2018
	<b>Realtek</b> , Hsinchu, Taiwan <i>Software Engineer</i> Developed H.264 encoder drivers for TV SOC's.	2016 – 2017
	<b>ITRI</b> , Hsinchu, Taiwan <i>Research Intern</i> Developed MultiPath TCP to achieve high throughput of wireless networks.	Summer 2015
	<b>National Tsing Hua University</b> , Hsinchu, Taiwan <i>Research Assistant</i> Collaborated with Jia-Shung Wang on real-time vehicle tracking system for visual surveillance.	2014 – 2016
	<b>GOTrust Technology</b> , Taichung, Taiwan <i>Software Engineer</i> Developed middlewares for the secure MicroSD card and established an MFC-based testing tool for the production of secure MicroSD cards.	2014

## PUBLICATIONS

1. **Why Is Prompt Tuning for Vision-Language Models Robust to Noisy Labels?**  
*International Conference on Computer Vision (ICCV) 2023*  
**Cheng-En Wu**, Yu Tian, Haichao Yu, Heng Wang, Pedro Morgado, Yu Hen Hu, Linjie Yang
2. **Self-supervised Video Representation Learning with Cascade Positive Retrieval**  
*L3D-IVU Workshop at Conference on Computer Vision and Pattern Recognition (CVPR) 2022*  
**Cheng-En Wu**, Farley Lai, Yu Hen Hu, Asim Kadav
3. **Merging Well-Trained Deep CNN Models for Efficient Inference**  
*Conference on Asia Pacific Signal and Information Processing Association (APSIPA) 2020*  
**Cheng-En Wu**, Jia-Hong Lee, Timmy ST Wan, Yi-Ming Chan, Chu-Song Chen
4. **Extending Conditional Convolution Structures For Enhancing Multitasking Continual Learning**  
*Conference on Asia Pacific Signal and Information Processing Association (APSIPA) 2020*  
 \*Cheng-Hao Tu \***Cheng-En Wu**, Chu-Song Chen
5. **Compacting, Picking and Growing for Unforgetting Continual Learning**  
*Conference on Neural Information Processing Systems (NeurIPS) 2019*  
 Steven Hung, Cheng-Hao Tu, **Cheng-En Wu**, Chien-Hung Chen, Yi-Ming Chan, Chu-Song Chen
6. **IMMVP: An Efficient Daytime and Nighttime On-Road Object Detector**  
*IEEE International Workshop on Multimedia Signal Processing (MMSP) 2019*  
**Cheng-En Wu**, Yi-Ming Chan, Chien-Hung Chen, Wen-Cheng Chen, Chu-Song Chen
7. **On Merging MobileNets for Efficient Multitask Inference**  
*EMC<sup>2</sup> Workshop at IEEE Symposium on High Performance Computer Architecture (HPCA) 2019*  
**Cheng-En Wu**, Yi-Ming Chan, Chu-Song Chen
8. **Traffic pattern modeling, trajectory classification and vehicle tracking within urban intersections**  
*IEEE International Smart Cities Conference (ISC2) 2017*  
**Cheng-En Wu**, Wen-Yen Yang, Hai-Che Ting, Jia-Shung Wang

PROFESSIONAL SERVICES	Reviewer for ICCV, CVPR, BMVC	2020 – Present
HONORS AND AWARDS	Honorable Mention at the MMSP Challenge	2019
	Delta Electronics Scholarship	2016
	NTUST ECE Undergraduate Honorable Mention for Research	2012
SELECTED PROJECTS	<b>Edge AI</b> <i>University of Wisconsin-Madison</i> Developed innovative block pruning methods for Convolutional Neural Networks, enabling seamless integration with edge devices like the NVIDIA Jetson Nano. <b>Urban Computing</b> <i>National Tsing Hua University, Visual Communication Lab</i> Designed a real-time vehicle tracking method from surveillance camera videos and developed a system for trajectory classification and tracklet prediction.	2022 – Present    2015 – 2016
	<b>Gesture Recognition</b> <i>National Taiwan University of Science and Technology</i> Developed a method for detecting the number of fingers raised and built an Android App for gesture control of PowerPoint presentations.	2010 – 2011