

# 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> Graduate 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>NEC Labs America</b> , Princeton, NJ <i>Research Intern</i> Collaborated with Farley 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	<ol style="list-style-type: none"><li>1. <b>Self-supervised Video Representation Learning with Cascade Positive Retrieval</b> <i>in Submission to Conference on Computer Vision and Pattern Recognition (CVPR) 2022</i> <b>Cheng-En Wu</b>, Farley Lai, Yu Hen Hu, Asim Kadav</li><li>2. <b>Merging Well-Trained Deep CNN Models for Efficient Inference</b> <i>Conference on Asia Pacific Signal and Information Processing Association (APSIPA) 2020</i> <b>Cheng-En Wu</b>, Jia-Hong Lee, Timmy ST Wan, Yi-Ming Chan, Chu-Song Chen</li></ol>	

3. **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
4. **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
5. **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
6. **Energy Efficient Machine Learning and Cognitive Computing for Embedded Applications**  
*Workshop at IEEE Symposium on High Performance Computer Architecture (HPCA) 2019*  
**Cheng-En Wu**, Yi-Ming Chan, Chu-Song Chen
7. **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 British Machine Vision Conference (BMVC)	2021
	Reviewer for British Machine Vision Conference (BMVC)	2020
	Reviewer for Journal of Information Science and Engineering (JSIE)	2020
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>Urban Computing</b>	2015 – 2016
	<i>National Tsing Hua University, Visual Communication Lab</i>	
	Designed a real-time vehicle tracking method in a surveillance camera and developed a system for trajectory classification and tracklet prediction.	
	<b>Gesture Recognition</b>	2010 – 2011
	<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.	
TEACHING EXPERIENCE	<b>Introduction to Massive Data Analysis</b>	Fall 2015
	<i>Teaching Assistant, National Tsing Hua University</i>	
	Helped design curriculum for the course, designed coding projects and delivered three lectures.	
	<b>Introduction to Media Coding</b>	Spring 2015
	<i>Teaching Assistant, National Tsing Hua University</i>	
	Assisted students at office hours, graded exams and maintained a course website.	