

Chung-Yi Weng

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Educations

- **Ph.D. Candidate in Computer Science & Engineering**, University of Washington **2018 ~ present**
 - *Advisors*: Brian Curless and Ira Kemelmacher-Shlizerman
- **M.S in Computer Science & Engineering**, University of Washington **2015 ~ 2018**
 - *Topic*: Photo Wake-Up: 3D Character Animation from a Single Photo
 - *Advisors*: Brian Curless and Ira Kemelmacher-Shlizerman
- **M.S. in Computer Science & Information Engineering**, National Taiwan University **2005 ~ 2007**
 - *Thesis*: RoleNet: Movie Analysis from the Perspective of Social Networks
 - *Advisor*: Ja-Ling Wu
- **B.S. in Computer Science & Information Engineering**, National Taiwan University **2001 ~ 2005**

Employment

- **Software Engineering Intern**, Google LLC **2019**
 - Augmented Perception group led by Shahram Izadi
 - Explored 3D neural rendering, co-working with Rohit Pandey, Christian Hane, Sofien Bouaziz, and Sean Fanello.
- **Research Intern**, Facebook, Inc. **2018**
 - Computational Photography group led by Michael Cohen
 - Worked on image, video and animation synthesis using deep generative neural networks
- **Principal Engineer/Senior Engineer/Engineer**, CyberLink Corp. **2008 ~ 2014**
 - *Tech Lead* in Magic Technology department, advising a team to develop various kinds of projects related to computer vision, computational photography, and machine learning
 - *13 executive projects*, including image segmentation, image matting, image composition, object/hand tracking, face detection and recognition
 - *9 registered patents (8 US patents, 1 JP patent)*

Publications

- **Journal Papers**
 - [J1] **Chung-Yi Weng**, Wei-Ta Chu, and Ja-Ling Wu, "RoleNet: Movie Analysis from the Perspective of Social Networks," IEEE Transactions on Multimedia, vol. 11, no.2, pp. 256-271, 2009. (*SCI/SCIE*) **2009**
- **Conference Papers**
 - [C1] **Chung-Yi Weng**, Brian Curless, and Ira Kemelmacher-Shlizerman, "Photo Wake-Up: 3D Character Animation from a Single Photo," IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2019. **2019**
 - [C2] **Chung-Yi Weng**, Wei-Ta Chu, and Ja-Ling Wu, "RoleNet: Treat a Movie as a Small Society," Proceedings of ACM SIGMM International Workshop on Multimedia Information Retrieval, 2007. **2007**
 - [C3] **Chung-Yi Weng**, Wei-Ta Chu, and Ja-Ling Wu, "Movie Analysis Based on Roles' Social Network," Proceedings of IEEE International Conference on Multimedia & Expo (ICME), 2007 **2007**

- [C4] Jun-Cheng Chen, Wei-Ta Chu, Jin-Hau Kuo, **Chung-Yi Weng**, and Ja-Ling Wu, "Tiling Slideshow," **2006**
 Proceedings of ACM Multimedia (MM), 2006. (*best paper award*)
- [C5] Ya-Ting Yang, Yo-Shin Tung, Ja-Lin Wu and **Chung-Yi Weng**, "Low-Bitrate Video Quality Enhancement by Frame Rate Up-Conversion and Adaptive Frame Encoding," Proceedings of the Pacific-Rim Conference on Multimedia (PCM), 2005 **2005**

Patents

● 8 US patents, 1 JP patent

- [P1] "Method of grouping images by face", US 8,121,358
 [P2] "Method of browsing photos based on people", US 8,531,478
 [P3] "Systems and methods for tagging photos", US 8,649,602
 [P4] "Systems and methods for performing facial detection", US 8,693,739
 [P5] "System and method for selecting an object boundary in an image", US 8,761,519
 [P6] "Systems and methods for improving object detection", US 8,769,409
 [P7] "Systems and methods for tracking an object in a video", US 8,867,789
 [P8] "Systems and methods for image editing", US 9,336,583
 [P9] "How to group images by face", JP 4,925,370

Honors & Fellowships

- **Reality Lab Research Fellow** **2018 ~ now**
- **Runner Up of People Choice's Award in Allen School Industry Affiliates Research Day** **2018**
- **The David Notkin Endowed Graduate Fellowship in Computer Science & Engineering** **2015 ~ 2016**
- **Best Paper Award in ACM Multimedia Conference** **2006**
- **Excellent Work of the 1st Acer Long-term Smile Contest** **2006**
- **National Science Council (NSC) Scholarship, Taiwan** **2005 ~ 2007**

Teaching Experience

- **TA Lead, CSE457 Computer Graphics** **University of Washington** **2020 Spring**
 - Instructor: Adriana Schulz
- **TA, CSEP557 Trends in Computer Graphics** **University of Washington** **2019 Spring**
 - Instructor: Brian Curless