

# CHUN-WEI LIU

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## EDUCATION

- PhD Student **University of North Carolina at Chapel Hill**, Chapel Hill, NC  
Computer Science, begins on Fall 2013
- MS **National Taiwan University**, Taipei, Taiwan  
Computer Science & Information Engineering, June 2010  
*Trajectory-based stereoscopic video stabilization*  
Advisor: Yung-Yu Chuang
- BS **National Chiao Tung University**, Hsinchu, Taiwan  
Computer Science, June 2008
- University of Illinois at Urbana-Champaign**, Champaign, IL  
Computer Science

## FELLOWSHIPS & HONORS

Government Scholarships to Study Abroad, Ministry of Education, Taiwan, 2012  
Graduate Study Fulbright Grants, United States Dept. of State, USA, 2011 [decline]  
Phi Tau Phi Scholastic Honor Society of the Republic of China, NTU, 2010  
Study Abroad Scholarship for Outstanding College Students, MOE, Taiwan, 2008  
Dean's List, NCTU, 2007

## RESEARCH EXPERIENCE

**Academia Sinica**, Taipei, Taiwan  
Research Assistant, Computer Vision Lab, advisor: Tyng-Luh Liu, 2011-2013  
Investigated decolorization algorithm using sparse linear model to preserving contrast in gray.  
Excavated fields of deep learning and computational neural networks.

**National Taiwan University**, Taipei, Taiwan  
Research Assistant, Communication & Multimedia Lab, advisor: Yung-Yu Chuang, 2008-2010  
Investigated stereoscopic media editing algorithms for applications on consumer 3D cameras.  
Excavated fields of computer vision and computer graphics.

## TEACHING EXPERIENCE

### **California Institute of Technology**, Pasadena, CA

Problem Design TA, Learning From Data, supervisor: Yaser Abu-Mostafa, Spring 2012  
Designed problem sets about Support Vector Machine for online students across the world.  
Reviewed the textbook *Learning From Data*.

### **National Taiwan University**, Taipei, Taiwan

Teaching Assistant, Machine Learning, supervisor: Hsuan-Tien Lin, Fall 2009  
Hosted TA hours for 120 enrolled students. Discussed course material in theory and practice.  
Received Outstanding Teaching Assistant Award.

## PUBLICATIONS

### **Refereed Conference**

**Liu, C. W.**; Huang, T. Z.; Chang, M. H.; Lee, K. Y.; Liang, C. K.; Chuang, Y. Y. "3D Cinematography Principles and Their Applications to Stereoscopic Media Processing," In Proceedings of the 19th ACM international conference on Multimedia (MM '11), 2011, 253-262 [Acceptance rate: 17%]

### **Poster**

**Liu, C. W.**; Huang, T. Z.; Chang, M. H.; Lee, K. Y.; Liang, C. K.; Chuang, Y. Y. "Stereoscopic Media Editing Based on 3D Cinematography Principles," In ACM SIGGRAPH 2011 Posters, 2011, Article 38, 1 page.

### **Domestic Conference**

**Liu, C. W.**; Lee, K.Y.; Huang, Y.H; Chang, M. H.; Liang, C. K.; Chuang Y. Y. "Trajectory-based Stereoscopic Video Stabilization," In Proceedings of Computer Vision, Graphics and Image Processing, Kaohsiung, Taiwan (R.O.C), September, 2010.

Chang, C. H.; **Liu, C. W**; Chang, M. H.; Liang, C. K.; Chuang Y. Y. "Content-aware Stereoscopic Image Retargeting," In Proceedings of Computer Graphic Workshop, Hsinchu, Taiwan (R.O.C), July, 2010. [Best Paper Award]

## OTHER EXPERIENCE

### **Republic of China Military Police**, Hsinchu, Taiwan

Chief Consular, Second Lieutenant, 2010-2011

Led a company of elite army during my mandatory military service. Minored in political warfare

**CyberLink Corp.**, Taipei, Taiwan  
Software Engineering Intern, Summer 2008  
Excavated field of human-computer interaction for the software PowerCinema.

## PROFICIENCY

### **Languages**

Fluent English; native Mandarin Chinese; basic French

## PERSONAL INTERESTS

### **Sports**

Cycling around Taiwan, Summer 2010  
NTU CSIE Basketball Team, 2008-2010  
NCTU Varsity Volleyball, 2004-2005