

YUEH-HSUAN CHIANG

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EDUCATION

University of Wisconsin – Madison, Dept. of Computer Sciences, Madison, WI

Ph.D., Computer Science, June 2014 (expected)

- ◆ Advisor: Prof. Jeffrey F. Naughton (naughton@cs.wisc.edu)
- ◆ Relevant coursework: advanced operating system (4.0/4.0), database management systems (4.0/4.0)

National Taiwan University, Dept. of Computer Science & Information Engineering, Taipei, Taiwan

M.S., Computer Science, June 2005; G.P.A: 4.00 / 4.00

- ◆ Advisor: Prof. Yi-Ping Hung (hung@csie.ntu.edu.tw)
- ◆ Master Thesis: “Soft Classification of lighting condition with LLDA for face recognition”
- ◆ Relevant coursework: digital speech processing (4.0/4.0), multi-agent systems(4.0/4.0), digital image processing (4.0/4.0)

B.S., Computer Science, June 2003; G.P.A: 3.60 / 4.00 with Awards

- ◆ Selected Honors/Awards:
 - Honorable Mention* in the **26th ACM ICPC World Finals**, 2002
 - 3rd Place* in the **ACM Asia Programming Contest**, 2001
 - 2nd Place* in the **National Collegiate Programming Contest**, Taiwan, 2001
- ◆ Relevant coursework: computer vision (4.0/4.0), pattern analysis and classification (4.0/4.0), statistical learning theory (4.0/4.0), virtual reality (4.0/4.0)

EXPERIENCE

University of Wisconsin – Madison, Madison, WI (<http://www.cs.wisc.edu/>)

Graduate Researcher, present

- ◆ Collaborate with a doctoral researcher on database management system related researches
- ◆ Develop Provenance Aware XLog Interpreter (PAXLog Interpreter), an interpreter for a query and rule language for deductive databases which enables user defined procedural predicates and provenance information for every query and rule

CyberLink Corp, Taipei, Taiwan (<http://www.cyberlink.com/>)

Software Engineer, October 2005 – June 2007

- ◆ Developed multimedia related techniques in Core Technology Team supporting wide ranged of products, including *PowerDVD*, *PowerCinema*, *PowerDirector*, *MediaShow*, and *MagicSports*
- ◆ Designed and implemented algorithms for *TrueTheater Enhancer*, a video quality improvement technology. (http://www.cyberlink.com/products/truetheater-enhancer/overview_en_US.html)
- ◆ Led the scoring event detection development of *MagicSports*, a sports game video analysis product, and contributed to its *Innovations Design and Engineering Award in CES 2007*
- ◆ Filed five patent applications relevant to video analysis, signal processing, and digital life
- ◆ Taught weekly training courses on video processing and pattern recognition for six months

MediaTek Inc., Taipei, Taiwan (<http://www.mediatek.com/en/index.php>)

Student Intern, February 2005 – May 2005

- ◆ Assisted in software development and testing in Man-Machine Interface group
- ◆ Developed multimedia applications on mobile devices
- ◆ Designed applications and tools for testing multimedia functionality of mobile devices

National Taiwan University, Taipei, Taiwan

Research Assistant, October 2008 to July 2009

- ◆ Collaborated with several doctoral researchers and graduate students to ensure successful and timely completion of projects
- ◆ Cooperated with *Microsoft Innovation Center (MIC)* in Taiwan in developing interactive applications on *Microsoft Surface* for *The Yongzhong Emperor and His Times Exhibition* held by National Palace Museum (<http://www.npm.gov.tw/exh98/yongzheng/>)

- ◆ Involved in both hardware and software design for an interactive multi-touch and multi-resolution tabletop system – *imTop*; designs including multi-touch detection, SDK for software development
- ◆ Demonstrated interactive tabletop system - *imTop* in Taiwan IT Month Exhibition
- ◆ Assisted EeRise Corp. in manufacturing interactive tabletop system
- ◆ Managed and mentored three graduate researchers
- ◆ Developed a video summarization system and published research in conference

Graduate Researcher, September 2003 – May 2005

- ◆ Collaborated with two graduate students in developing a personalized authentication system, which was published in the International Conference on Pattern Recognition
- ◆ Developed face recognition and video processing researches

Teaching Assistant, September 2003 – July 2004

- ◆ Designed and taught several full lectures in absence of professors
- ◆ Composed term project assignments; graded homework and exams; developed software and sample codes for courses; designed and maintained course webpage
- ◆ Courses included “*Introduction to Algorithms*” and “*Pattern Analysis and Classification*”

HONORS AND AWARDS

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|---|--------------|
| 1. <i>Studying Abroad Scholarship from Ministry of Education, Taiwan</i> | 2009 to 2010 |
| 2. <i>Innovations Design & Engineering Award in Consumer Electronics Show (CES)</i>
awarded to the product – MagicSports (refer to my experience in CyberLink) | 2007 |
| 3. <i>Honorable Mention in the 26th ACM International Programming Contest World Finals</i>
from among 64 teams chosen from a field of 2,362 teams from 1,141 universities | 2002 |
| 4. <i>3rd Place in the ACM Asia Programming Contest</i>
from among 60 teams from countries in Asia, Taipei Site | 2001 |
| 5. <i>2nd Place in the National Collegiate Programming Contest, Taiwan</i>
from among 88 teams selected from all universities in Taiwan | 2001 |
| 6. <i>1st Place in the National Taiwan University Programming Contest</i> | 2001 |
| 7. <i>3rd Place in the Regional High-School Mathematics Competition, Taipei</i> | 1999 |
| 8. <i>3rd Place in the Regional High-School Informatics Competition, Taipei</i> | 1999 |
| 9. <i>Participant Candidate for International Olympiad in Informatics (IOI)</i>
the top 6 students chosen from all senior high schools in Taiwan | 1999 |
| 10. <i>1st Place in the National High-School Programming Contest, Taipei</i> | 1998 |
| 11. <i>2nd Place in the Regional High-School Informatics Competition, Taipei</i> | 1998 |
| 12. <i>3rd Place in the National High-School Informatics Competition, Taiwan</i> | 1998 |

RESEARCH PUBLICATIONS

1. Wei-Ting Peng, **Yueh-Hsuan Chiang**, Wei-Ta Chu, Wei-Jia Huang, Wei-Lun Chang, Po-Chung Huang, and Yi-Ping Hung, "Aesthetics-based Automatic Home Video Skimming System", Proceedings of International Multimedia Modeling Conference (MMM'08), Kyoto, January 2008.
2. **Yueh-Hsuan Chiang** and Yi-Ping Hung, "Soft Classification of lighting condition with LLDA for face recognition", Proceedings of the 18th IPPR Conference on Computer Vision, Graphics and Image Processing, Taipei, August 2005.
3. **Yueh-Hsuan Chiang**, "Lighting Condition Class-Based Locally Linear Discriminant Analysis for Face Recognition", Master Thesis, National Taiwan University, 2005.
4. Hsien-Chang Liu, Chan-Hung Su, **Yueh-Hsuan Chiang**, Yi-Ping Hung, "Personalized face verification system using cluster-dependent LDA subspace", Proceedings of 17th International Conference on Pattern Recognition (ICPR'04), August 2004.

PATENT APPLICATION PUBLICATIONS

Submitted *five* patent applications total, one of which is not listed below as they have not reached the early disclosure stage

1. Determining an Intermediate Image
Inventors: Pin-Ting Lin, **Yueh-Hsuan Chiang**
Pub. No.: US 2009/0296814 A1
Pub. Date: Dec 3, 2009
2. Method and Apparatus for Determining Highlight Segments of Sport Video
Inventors: **Yueh-Hsuan Chiang**, Ming-Jun Chen, Bor-Ching Lin, Ho-Chao Huang
Pub. No.: US 2009/0060342 A1
Pub. Date: May 30, 2009
3. Method and display system capable of detecting a scoreboard in a program
Inventors: Chen-Hsiu Huang, **Yueh-Hsuan Chiang**, Ho-Chao Huang
Pub. No.: US 2008/0130997 A1
Pub. Date: Jun 5, 2008
4. Methods, communication device, and communication system for presenting multi-media content in conjunction with user identifications corresponding to the same channel number
Inventor: **Yueh-Hsuan Chiang**
Pub. No. : US 2007/0277217 A1
Pub. Date: Nov 29, 2007

ACTIVITIES

Association for Computing Machinery (ACM)

Student member, 2002 – 2003

The National Workshop of International Olympiad in Informatics, Taipei, Taiwan

Participant Candidate for International Olympiad in Informatics, 1999

- ◆ the top 6 students chosen from all senior high schools in Taiwan

Student member, 1998 & 1999

- ◆ the top 28 students chosen from all senior high schools in Taiwan through National Senior High School Informatics Competition

SKILLS

Languages: C/C++, C#, Java, Matlab, SQL, XML, XAML

Development Tools: DirectX, OpenGL, Surface SDK, .NET, MFC, WPF, OpenCV

Operating Systems: Windows 7/Vista/XP/2K/NT/95/95, Linux