

Sirius (Bor-Chun) Chen

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EDUCATION

- Ph.D. student in Computer Science, University of Maryland** Sep. 2014 - Present
Research interests: computer vision, machine learning, and multimedia retrieval
- M.S. in Computer Science, National Taiwan University (NTU), Taiwan** Jun. 2012
GPA 4.2/4.3, Thesis: Large-Scale Face Image Retrieval using Semantic Codewords
- B.S. in Computer Science, NTU** Jun. 2010
GPA 3.9/4.0 with 2 President's Awards, Minor in Economic

PROFESSIONAL EXPERIENCES

- **Summer Intern, FX Palo Alto Laboratory** May. - Aug. 2015
Develop a novel framework for multimodal business venue recognition. Achieving 78.5% recognition rate.
- **Teaching Assistant, University of Maryland** Sep.14 - Present
Undergraduate courses: CMSC122 Intro to programming via web
- **Research Assistant, Academia Sinica, Taiwan** Sep. 2013 - Aug. 2014
-Develop an algorithm for cross-age face recognition by utilizing celebrity images on the Internet, and increase the mean average precision from 36.6% to 52.9%
-Conduct experiments on food recognition using CNN with social media. Our team won the Multimodal Award in ACM Multimedia Grand Challenge, 2014.
- **Corporal, Republic of China Army** Oct. 2012 - Sep. 2013
Maintain a wired communication system in Joint Operations Command Center
- **Research Intern, National Institute of Informatics, Tokyo** Apr. 2012 - Jul. 2012
Use bag-of-faces sparse representation to encode face track in video and improve retrieval accuracy and response time for face retrieval in large-scale video archive
- **Research Assistant, Communication and Multimedia Lab, NTU** Sep. 2010 - Jun. 2012
-Develop a large-scale face image retrieval system using semantic codewords with inverted indexing. Achieve 72% mean average precision for face retrieval
-Design a novel way to search consumer photos using facial attributes. Our system won the first place in ACM Multimedia Grand Challenge, 2011
- **Teaching Assistant, NTU** Sep. 2010 - Jun. 2011
Undergraduate courses: probability, database system

SELECTED HONORS AND AWARDS

- **2014 ACM Multimedia Grand Challenge Multimodal Award** Nov. 2014
- **Dean's Fellowship, University of Maryland** Sep. 2014
- **Best Master Thesis Award of Taiwanese Association for Artificial Intelligence** Nov. 2012
- **Garmin Scholarship Award** Jan. 2012
- **1st Prize in 2011 ACM Multimedia Grand Challenge** Nov. 2011
- **2nd Place in Cloud Application Contest by Chunghwa Telecom, Taiwan** Nov. 2011

SELECTED PUBLICATIONS

- [Bor-Chun Chen](#), Chu-Song Chen, and Winston H. Hsu. Cross-age reference coding for age-invariant face recognition and retrieval. **European Conference on Computer Vision (ECCV), 2014**
- Yin-Hsi Kuo, Yan-Ying Chen, [Bor-Chun Chen](#), Wen-Yu Lee, Chun-Che Wu, Chia-Hung Lin, Yu-Lin Hou, Wen-Feng Cheng, Yi-Chih Tsai, Chung-Yen Hung, Liang-Chi Hsieh, Winston Hsu. Discovering the City by Mining Diverse and Multimodal Data Streams. **ACM Multimedia, 2014 (Grand Challenge)**
- Hong-Wun Jheng, [Bor-Chun Chen](#), Yan-Ying Chen, Winston H. Hsu. Automatic Facial Image Annotation and Retrieval by Integrating Voice Label and Visual Appearance. **ACM Multimedia, 2014.**
- [Bor-Chun Chen](#), Y.-Y. Chen, Y.-H. Kuo, T. Ngo, D. Le, S. Satoh, W. Hsu. Scalable Face Track Retrieval in Video Archives using Bag-of-Faces Sparse Representation. **IEEE TCSVT, 2014**
- [Bor-Chun Chen](#), Yan-Ying Chen, Yin-Hsi Kuo, Winston H. Hsu. Scalable Face Image Retrieval using Attribute-Enhanced Sparse Codewords. **IEEE Transactions on Multimedia, 2013**
- Yu-Heng Lei, Yan-Ying Chen, [Bor-Chun Chen](#), Lime Iida, Winston Hsu. Where is Who: Large-Scale Photo Retrieval by Facial Attributes and Canvas Layout. **SIGIR, 2012**
- [Bor-Chun Chen](#), Yin-Hsi Kuo, Yan-Ying Chen, Kuan-Yu Chu, Winston Hsu. Semi-Supervised Face Image Retrieval Using Sparse Coding with Identity Constraint. **ACM Multimedia 2011**
- Yu-Heng Lei, Yan-Ying Chen, [Bor-Chun Chen](#), Hsiao-Hang Su, Lime Iida, Winston Hsu. Photo Search by Face Positions and Facial Attributes on Touch Devices. **ACM Multimedia 2011 (Grand Challenge)**

PROFICIENCY

Languages

Chinese (native), English (TOEFL score: 103), Japanese (JLPT N3 passed)

Programming Languages and Tools

Experienced: C/C++, MATLAB, Python, UNIX Shell Script Capable: JAVA, PHP, JavaScript, HTML