KEVIN (KE-YUN) LIN

kevinlin311.tw@gmail.com

RESEARCH INTERESTS

Computer Vision, Machine Learning, and Multimedia.
Recent Focus: Deep Learning, Image Search, Object Recognition and Detection.

EDUCATION

National Taiwan University 2012 – 2014
M.S. in Computer Science – GPA 4.18/4.30
Thesis: Abandoned Luggage Detection for Visual Surveillance
Advisors: Prof. Yi-Ping Hung and Prof. Chu-Song Chen

National Taiwan University of Science and Technology 2008 – 2012
B.S. in Electronic Engineering – GPA 4.0/4.0, Rank Top 5% (5/112)
Minor degree in Dept. of Applied Foreign Language

PROFESSIONAL EXPERIENCES

Advanced Digital Sciences Center Singapore
Research Engineer *July 2015 - Present*

- Supervisor: Prof. Jiwen Lu
- Project: **Unsupervised Deep Learning of Binary Image Descriptors**
  Engaged in binary descriptors learning with unsupervised deep convolutional neural networks.

Academia Sinica Taipei, Taiwan
Research Assistant *Sept. 2014 - June 2015*

- Supervisor: Prof. Chu-Song Chen
- Project: **Deep Learning of Binary Hash Codes for Rapid Image Search**
  Innovated an effective deep learning framework to create binary hash codes for rapid image retrieval.

Yahoo Taipei, Taiwan
Software Engineering Intern *July 2014 - Sept. 2014*

- Supervisors: Dr. Tzu-Chiang Liou and Dr. Jen-Hao Hsiao
- Project: **Shoppable Media: A multimodal solution to media monetisation**
  Design a clothing recommendation system via image retrieval and style annotations search.

JOURNAL ARTICLES

- H.-F. Yang, K. Lin, C.-S. Chen. **Supervised Semantics-Preserving Hash via Deep Convolutional Neural Networks.** Submitted to IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI).
- K. Lin, S.-C. Chen, C.-S. Chen, D.-T. Lin, Y.-P. Hung. **Abandoned Object Detection via Temporal Consistency Modeling and Back-Tracing Verification for Visual Surveillance.** IEEE Transactions on Information Forensics and Security (TIFS), 10(7):1359-1370, 2015.

REFEREED CONFERENCE PAPERS

- K. Lin, H.-F. Yang, J.-H. Hsiao, C.-S. Chen. **Deep Learning of Binary Hash Codes for Fast Image Retrieval.** CVPR 2015, DeepVision Workshop. **(Spotlight oral and poster)**
- K. Lin, H.-F. Yang, K.-H. Liu, J.-H. Hsiao, C.-S. Chen. **Rapid Clothing Retrieval via Deep Learning of Binary Codes and Hierarchical Search.** ACM ICMR 2015.

- S.-C. Chen, K. Lin, C.-S. Chen, Y.-P. Hung. **Location-Aware Object Detection via Coherent Region Grouping.** ICASSP 2015. **(Oral presentation)**
- K.-W. Chen, S.-C. Chen, K. Lin, M.-H. Yang, C.-S. Chen, Y.-P. Hung. **Object Detection for Neighbor Map Construction in an IoV System.** IEEE iThings 2014. **(Best paper award)**
- K. Lin, S.-C. Chen, C.-S. Chen, D.-T. Lin, Y.-P. Hung. **Left-Luggage Detection from Finite-State-Machine Analysis in Static-Camera Videos.** ICPR 2014.
- S.-C. Chen, C.-W. Hsu, S.-Y. Lin, K. Lin, Y.-P. Hung. **Teleport: Space Navigation by Detecting the Self-motion of A Mobile Device**. ACM SIGGRAPH Asia Posters 2013.
- K. Lin, M.-C. Shie. **Biologically Inspired 3D Trajectory Prediction System Using a Moth Flight-to-light Tracking Model.** IEEE ICSIPA 2011. **(Best student paper award)**

TEACHING EXPERIENCE

National Taiwan University Taipei, Taiwan
Teaching Assistant *Fall 2013*

- **Pattern Recognition and Classification:** graduate course taught by Prof. Yi-Ping Hung.

AWARDS

Honorable Mention of the MS Thesis Award, IAPR Taiwan Association, 2015

ICASSP Travel Grant, IEEE Signal Processing Society, 2015

Best Paper Award, IEEE iThings, 2014

Best Student Paper Award, IEEE ICSIPA, 2011

National Science Council Undergraduate Research Fellowship, 2011–2012

Presidential Award, 5 times, GPA in the top 5% of the students in Dept. of Electronic Engineering, NTUST, 2008–2012

SKILLS

Programming Language: C/C++, Shell script, Matlab, Python, LaTeX, Verilog

Tools: Caffe, OpenCV, OpenGL, Gnuplot, Arduino

My Codes on Github: `https://github.com/kevinlin311tw`