mengjiun.chiou@u.nus.edu

**EDUCATION** 

National University of Singapore, Singapore

Aug. 2017-Present

Ph.D. in Computer Science

- Supervised by Prof. Roger Zimmermann and Prof. Jiashi Feng
- Worked at Media Management Research Lab and Learning & Vision Lab
- Research Interest: Computer Vision (Visual Scene Understanding) and Machine Learning

Sep. 2012- National Chiao Tung University, Hsinchu, Taiwan

Jun. 2016 B.Sc. in Electrical and Computer Engineering

- Overall GPA: 3.89/4.30 (or 3.90/4.00)
- Computer Science Courses: Data Structure, Design and Analysis of Algorithms, Object-Oriented Programming, Computer Vision, Data Mining, Virtual and Augmented Reality, Database

Oct. 2014- The University of Tokyo, Tokyo, Japan

SEP. 2015 Exchange Student in Information and Communication Engineering

- Supervised by Prof. Toshihiko Yamasaki and Prof. Kiyoharu Aizawa
- Worked at Multimedia Processing Lab
- Computer Science Courses: Artificial Intelligence, Statistical Machine Learning, Computer Architecture, Discrete Mathematics, Operating Systems, Computer Networks

#### **Publications**

- Meng-Jiun Chiou, Henghui Ding, Hanshu Yan, Changhu Wang, Roger Zimmermann and Jiashi Feng, "Recovering the Unbiased Scene Graphs from the Biased Ones". Under reviewing in the 29th ACM International Conference on Multimedia (ACMMM'21), Oct. 2021.
- Meng-Jiun Chiou, Chun-Yu Liao, Li-Wei Wang, Roger Zimmermann and Jiashi Feng, "ST-HOI: A Spatial-Temporal Baseline for Human-Object Interaction Detection in Videos", in *Proceedings of the 2021 ACM International Conference on Multimedia Retrieval (ACM ICMR'21) Workshop on Intelligent Cross-Data Analysis and Retrieval*, Aug. 2021.
- Meng-Jiun Chiou, Roger Zimmermann and Jiashi Feng, "Visual Relationship Detection with Visual-Linguistic Knowledge from Multimodal Representations". In *IEEE Access* 9: 50441-50451, Mar. 2021.
- Meng-Jiun Chiou, Zhenguang Liu, Yifang Yin, An-An Liu and Roger Zimmermann, "Zero-Shot Multi-View Indoor Localization via Graph Location Networks". In *Proceedings of the 28th ACM International Conference on Multimedia* (ACMMM'20), Oct. 2020.
- Yifang Yin, Meng-Jiun Chiou, Zhenguang Liu, Harsh Shrivastava, Rajiv Ratn Shah and Roger Zimmermann, "Multi-Level Fusion based Class-aware Attention Model for Weakly Labeled Audio Tagging". In *Proceedings of the 27th ACM International Conference on Multimedia* (ACMMM'19), Oct. 2019.
- Meng-Jiun Chiou, Yamasaki Toshihiko and Aizawa Kiyoharu, "A Fast Table-Based Approach of Bag-of-Features for Large-Scale Image Classification". In *Image Information and Television Engineers Annual Conference* (ITE'15), Aug. 2015.
- Meng-Jiun Chiou, Yamasaki Toshihiko and Aizawa Kiyoharu, "A Fast Method of Visual Words Assignment of Bag-of-Features for Object Recognition". In *The 18th Meeting on Image Recognition and Understanding* (MIRU'15), Jul. 2015.

## Selected Project

Few-Shot Detection

Meng-Jiun Chiou and Xiao Ma, at the National University of Singapore

Course Project

Few-Shot Object Detection is an adaptation to few-shot learning with meta learning based on the Faster R-CNN framework. The project is implemented with PyTorch.

• Demo video: https://www.youtube.com/watch?v=le8SCMjNeCE

 $The \ Light$ 

Meng-Jiun Chiou, Xiao Ma, Yaqi Xie and Ziwei Xu, at the hackathon

Hackathon Project  $The\ Light$  navigates blind people to move around smoothly in real time using MobileNet for object segmentation. It won  $2^{nd}$  prize at iNTUition Hackathon 2017.

• Project page: https://devpost.com/software/thelight

https://coldmanck.github.io/

## SERVICES AND MEMBERSHIPS

- Program Committee, CVPR 2018 Workshop on Visual Understanding of Humans in Crowd Scene, BigMM 2020 Graduate Student Consortium
- Reviewer, ACM MM ('21, '20), IEEE TIP ('20), ACM TOMM ('20), Springer MMSJ ('19), NUS MSCS Admission ('21, '20)
- Teaching Assistant, Big-Data Analytics Technology (NUS, 2021), Computer Vision and Pattern Recognition (NUS, 2018-20), Data Structures and Algorithms (NUS, 2017-18), Special Friday Lecture for High School Students (UTokyo, 2014-15)

## AWARDS AND SCHOLARSHIPS

- Oct. 2017 **2<sup>nd</sup> Place**, iNTUition Hackathon 2017
  - A 24-hour hackathon held at Nanyang Technological University, Singapore
- Aug. 2017 NUS Research Scholarship, National University of Singapore
  - Including full tuition waiver and monthly stipend.
- Oct. 2015 Helm Technology Scholarship, Helm Technology Inc.
  - Awarded to students with superb overall GPA
- Oct. 2014 Student Exchange Support Program, Japan Student Services Organization
  - Chosen by The University of Tokyo
- Oct. 2014 Short Term Exchange Scholarship, National Chiao Tung University
  - Awarded to exchange students with the top 20% overall GPA
- MAY. 2014 Xiao Yuan-Long Scholarship, NCTU Electrical and Computer Engineering
  - Awarded to students with superb overall GPA

#### Experience

- Jun. 2020- Research Intern at Asus Intelligent Cloud Services (AICS), Singapore
- SEP. 2020 I developed a strong baseline for video-based human-object interaction detection. A paper wrapping up my work has been published to ICDAR'21 (an ACM-ICMR'21 workshop).
- DEC. 2015- Research Assistant at Academia Sinica, Taiwan
- APR. 2016 I worked on image segmentation with Dr. Yu-chiang Frank Wang at *Multimedia and Ma-chine Learning Lab*.
- Jul. 2013- Software Development Intern, Microsoft Student Partners at Microsoft Taiwan
- Jun. 2014 I developed Windows 8 applications, e.g., NHK Reader with 7,000+ downloads.
  - NHK Reader product page: https://www.microsoft.com/en-us/p/nhk-reader/9wzdncrdqpdb

# SKILLS

- Deep Learning Framework: Proficent in PyTorch
- Programming: Proficient in Python; Experienced in C++, Matlab and Java
- Languages: Mandarin Chinese (native), English (fluent) and Japanese (fluent; JLPT N1)

### Extracurricular Activities

- Jun. 2013- Vice President at Chien-Kuo and Taipei First Girls' High School Alumni Association,
- May. 2014 National Chiao Tung University
  - I took on leadership roles by organizing a variety of events.