參與國際會議 鍛鍊學術英文

文稿整理／林珮雯

　　全球化浪潮下，各國對國際化的重視日益升高，其中參與國際會議即是最佳鍛鍊學術能力及國際競爭力途徑之一。近期，本院碩博士生踴躍參與頂尖國際會議論文發表，整體研究成果豐碩，陳志成教授師生團隊更獲 MobiCom 2020 SRC 的第一名。以下是我們邀請幾位參與國際會議發表同學分享心得：

發表論文：Reward-Biased Maximum Likelihood Estimation for Linear Stochastic Bandits
作者：Yu-Heng Hung, Ping-Chun Hsieh , Xi Liu,and P. R. Kumar
指導教授：謝秉均老師
國際會議：Association for the Advancement of Artificial Intelligence (AAAI)
該會議重要性：AAAI 是人工智慧（AI）領域的頂級會議之一。 今年，總共 9034 篇論文投稿 AAAI，有 1692 篇論文被接受。這樣總體接受率約為 21%。 為了促進 AI 研究品質以及鼓勵研究人員之間的科學交流，AAAI 用嚴謹的審核標準來篩選被接受的論文。除此之外，AAAI 也是每年人工智慧領域領域中各個研究員、企業、講者能夠彼此交流的一個重要場地。
洪鈺恆同學心得分享：非常感謝教授在這段時間的幫忙。尤其是在寫作上遇到困難時，教授總是不厭其煩的引導我如何更好及更準確的表達自己的想法。收到被接受的通知的那一刻，真的很高興我們的研究被大家認同。 但是今年的 AAAI 因為疫情的關係所以改成線上會議，時差讓所有與會者無法同時開會討論， 這使得會議現場的熱絡程度沒有往年高。儘管如此，還是遇到了幾位對這篇論文感興趣的與會者，在得到他人的鼓勵與支持後，我對未來的研究方向有了更多的信心和想法。

發表論文：Using magnetic fingerprints to position cars on multi-layer roads
作者：Ping-Fan Ho, Chia-Chen Wang, and Jyh-Cheng Chen
指導教授：陳志成老師
國際會議：ACM International Conference on Mobile Computing and Networking (MobiCom) 2020
該會議重要性：MobiCom 為行動計算及無線通訊領域的頂尖會議。
王嘉誠同學心得分享：ACM 的會議都有一個很特別的競賽，叫做 "The ACM Student Research Competition (SRC)"。在我們的海報論文 (poster paper) 被接受之後，也獲選參加 SRC。為了能在競賽中獲勝，我夙夜匪懈的準備 paper 的報告。但一想到競爭對手都是各國頂尖的研究者，當下著實覺得希望渺茫。沒想到，我們的 paper 竟然獲得了 MobiCom 2020 SRC 的第一名！而且，是從 2005 年 MobiCom SRC 開辦以來，台灣的學校第一次獲得研究所組的前三名！能獲得這個獎，最感謝的是一路上悉心指導我，在研究上給予我很多幫忙的陳志成教授。也謝謝平凡研究員技術建議。還有謝謝本實驗室陳禕及涂瑞衡同學的協助。拿了這個獎之後，讓我對自己的研究更有信心了！

發表論文：Every Pixel Matters: Center-aware Feature Alignment for Domain Adaptive Object Detector
作者：Cheng-Chun Hsu, Yi-Hsuan Tsai, Yen-Yu Lin, and Ming-Hsuan Yang
指導教授：林彥宇老師
國際會議：European Conference on Computer Vision (ECCV)2020
該會議重要性：ECCV 是兩年一次的電腦視覺研究會議，與 CVPR、ICCV 並列電腦視覺領域的三大頂級會議。ECCV 2020 的投稿數為 5025 篇，其中有 1361 篇被接收，接收率約略為 27%。
徐晟鈞同學心得分享：此次 ECCV 為我參加過的第二個電腦視覺 / 人工智慧相關的國際研討會議，同時也是我個人在 Domain adaptation 領域的第一個研究成果。這次有幸能參加 ECCV 會議很大程度上得仰賴老師及學長的幫忙，無論是在理論發想、實驗設計和寫作上，他們都給了我不可或缺的協助。由於疫情緣故，此次會議被改為線上會議，Poster 階段變成所有作者自己主持一個線上會議房，因此如果想聽報告或提問只需要加入對方房間即可，不用人擠人，也算是很特別的經驗。總之，參加會議室一次很好的學術交流經驗，過程中不但能與世界各地不同背景的學者交流，也能得到一些有效的回饋，對未來研究很有幫助。

發表論文：Learning Face Recognition Unsupervisedly by Disentanglement and Self-Augmentation
作者：Yi-Lun Lee, Min-Yuan Tseng, Yu-Cheng Luo, Dung-Ru Yu, and Wei-Chen Chiu
指導教授：邱維辰老師
國際會議名稱：International Conference on Robotics and Automation (ICRA) 2020
該會議重要性：ICRA 為機器人領域中最頂尖的會議。該會議收錄許多與機器人以及自動化相關的論文。
李懿倫同學心得分享：這是我第一個研究題目，很榮幸的能夠被世界頂尖會議所接受。當收到論文被接受的通知當下，內心既開心又興奮。然而，可惜的是剛好碰上疫情爆發，最後會議為了安全考量，緊急改成透過 slack 線上舉辦。雖然有些許沮喪，但依然能夠在線上分享所做的成果。會議過程中有來自世界各地的學者討論著我的研究方法以及成果，同時也給了一些不錯的建議，從中我受益良多。除此之外，會議中也有其他優秀的研究，透過參與他們的報告使我增廣見聞，吸收不同研究領域的精華。這次參加國際會議讓我學到如何表達自己以及與國外學者互相討論交流，並也深刻的意識到語言上的不足，期望下次還有機會參加國際會議時能夠更好的透過英文來表達溝通。

發表論文：DEN: Disentangling and Exchanging Network for Depth Completion
作者：You-Feng Wu, Vu-Hoang Tran, Ting-Wei Chang, Wei-Chen Chiu, and Ching-Chun Huang
指導教授：邱維辰老師、黃敬群老師
國際會議名稱：25th International Conference on Pattern Recognition (ICPR 2020)
該會議重要性：ICPR 為 IAPR(International Association for Pattern Recognition) 組織下最大的研討會之一。近年來專注於提供在電腦視覺、語音、自然語言處理、人工智慧等領域一個大型的交流平台。此次為 ICPR 第 25 屆，而該研討會也已有接近 50 年的歷史。今年一共有 3250 篇投稿，並有 1411 篇被接受 (約 43.4%)，我們的論文更是榮幸能被選為其中僅佔 144 篇 (約 4.4%) 的 Oral paper 之一。
張庭維同學分享：因疫情的關係，這次研討會很可惜的改成線上分享，包含預先錄製介紹影片，及單天的線上的簡短介紹及 QA 環節。ICPR 很貼心的將不同主題分成多個不同時段及不同的線上會議室，讓與會者可以選擇自己有興趣的主題進行線上的交流。雖然要在很多學者前全英文解說我們的論文很讓人緊張，但是能回答他們的問題、聽取他們的建議卻也是一個無比有趣的經驗。且線上研討會也沒有想像中的嚴肅、死氣沈沈，相反的聽到很多幽默的講者，用輕鬆的方式解說他們令人驚豔的研究，是我學習的典範。參加這次會議是我一個難能可貴的經驗，接觸到很多最先進的想法的同時，也讓我學習如何更好的闡明自己的理念，讓其他人更快速的理解自己的想法。

Attending International Conferences to Build Up Academic English Skills

Due to the coming of a new wave of globalization, a lot of positive attention has been given to internationalization in many countries. Attending international conferences is one of the best ways to polish academic English skills and strengthen global competitiveness. Recently, the graduate students of our college have actively participated in top international conferences to deliver oral or poster presentations, which boosts the overall research productivity. The team of Dr. Jyh-Cheng Chen won the first-place award in MobiCom 2020 SRC. Some of the students, attending international conferences in 2020, share their experiences as follows:

Title of Article：Reward-Biased Maximum Likelihood Estimation for Linear Stochastic Bandits
Authors：Yu-Heng Hung, Ping-Chun Hsieh , Xi Liu,and P. R. Kumar
Advisor：Dr. Ping-Chun Hsieh
International Conference：Association for the Advancement of Artificial Intelligence (AAAI)
The Significance of the conference：AAAI is one of the top conferences in artificial intelligence (AI). In this year, 9,034 papers were reviewed and approximately 1,692 papers were accepted, with an overall acceptance rate of 21%. To promote research in the field of artificial intelligence and foster scientific exchange between researchers, AAAI selected papers on artificial intelligence according to the highest reviewing standards.
The experience of Yu-Heng Hung: I truly appreciate Professor Hsieh's support during the sessions in the conference. Especially when I encounter difficulties in writing, Professor Hsieh always helped me present our ideas effectively and precisely. I am very delighted to know that my paper was accepted by AAAI. However, it's a pity that AAAI-21 was changed to a virtual conference due to the pandemic. It is hard to meet at the same time for all participants owing to time deference, so the conference was less active this year. Nevertheless, after engaging with other researchers who are interested in our work, I have more confidence and ideas for future research directions.

Title of Article：Using magnetic fingerprints to position cars on multi-layer roads
Authors: Ping-Fan Ho, Chia-Cheng Wang, and Jyh-Cheng Chen
Advisor: Dr. Jyh-Cheng Chen
International Conference: ACM International Conference on Mobile Computing and Networking (MobiCom) 2020
The Significance of the conference: MobiCom is a top conference in mobile computing and wireless networking.
The experience of Chia-Cheng Wang: ACM conferences offer a special competition called "The ACM Student Research Competition (SRC)." After our poster paper was accepted, we were also selected to participate in SRC. In order to win the competition, I have been working hard to prepare for the presentation. However, I didn't exactly think of success once I saw that the competitors are all top researchers from different countries. Out of my surprise, our paper won the first-place award in MobiCom 2020 SRC! It is the first time that the students in Taiwan have received the top-three awards in the graduate category since the inauguration of MobiCom SRC in 2005. I would like to thank my advisor, Professor Jyh-Cheng Chen. He gave me lots of advice and helped me with my research. I would also like to thank Dr. Ping-Fan Ho for technical suggestions. In addition, Yi Chen and Rui-Heng Tu, I really appreciate your assistance. Because of this award, I feel very confident about my research!

Title of Article：Every Pixel Matters: Center-aware Feature Alignment for Domain Adaptive Object Detector
Authors：Cheng-Chun Hsu, Yi-Hsuan Tsai, Yen-Yu Lin, and Ming-Hsuan Yang
Advisor：Dr. Yen-Yu Lin
International Conference：European Conference on Computer Vision (ECCV)2020
The Significance of the conference：ECCV, one of the top conferences in computer vision, alongside CVPR and ICCV, is a biennial research conference. ECCV 2020 has an acceptance rate of 27 %, 1,361 out of 5,025 submissions.
The experience of Cheng-Chun Hsu: ECCV 2020 is not only the second international conference I have attended in computer vision/artificial intelligence fields, but also the first conference I have presented my research result in the field of Domain adaptation. It is the honor for me to have a chance to attend the ECCV conference. My advisor and seniors have given me all necessary assistance regarding theory development, experimental design and writing. Due to the pandemic, the conference was changed to be online. The Poster presentation was turned into a virtual conference room hosted by all presenters. In other words, if you want to hear presentations or ask questions, you may join one of the rooms without jumping into crowds as an in-person conference, which was a very special experience for me. In short, attending the conference would get amazing academic exchange experience. I have not only communicated with scholars from different backgrounds around the world, but also received some effective feedback, which might be very helpful for future research.

Title of Article：Learning Face Recognition Unsupervisedly by Disentanglement and Self-Augmentation
Authors：Yi-Lun Lee, Min-Yuan Tseng, Yu-Cheng Luo, Dung-Ru Yu, and Wei-Chen Chiu
Advisor：Dr. Wei-Chen Chiu
International Conference：International Conference on Robotics and Automation (ICRA) 2020
The Significance of the conference：ICRA is the top conference on Robotics and Automation. ICRA2020 received 3,512 submissions, a new record, from 64 countries and 14,665 authors. Overall, 3,446 papers were reviewed.
The experience of Yi-Lun Lee: It is my first research topic, and I am honored to be accepted by one of the top conferences in the world. When I received the notification that my paper was accepted, my heart was full of joy. However, it is a pity that the conference was changed to be held online via slack due to the pandemic. It was fine with me to share my research online even though I felt a little frustrated. During the conference, scholars from all over the world discussed my research methods and results, and gave me some good suggestions. I benefited a lot from the discussion. In addition, there were some excellent researchers in the conference. Hearing their presentations has broadened my knowledge and made me realize the essence of research in different fields. By attending the international conference, I learned how to express myself and communicate with foreign scholars; in addition, I realized my English skill is insufficient. I hope I can speak in English well when I have the opportunity to attend an international conference next time.

Title of Article：DEN: Disentangling and Exchanging Network for Depth Completion
Authors：You-Feng Wu, Vu-Hoang Tran, Ting-Wei Chang, Wei-Chen Chiu, and Ching-Chun Huang
Advisor：Dr. Wei-Chen Chiu and Dr. Ching-Chun Huang
International Conference：25th International Conference on Pattern Recognition (ICPR 2020)
The Significance of the conference：ICPR2020 is the flagship conference of IAPR the International Association of Pattern Recognition and the premiere conference in pattern recognition, covering computer vision, image, sound, speech, sensor patterns processing and machine intelligence. It is the 25th event of the series, so turning 50 years old since its beginning. There are 3,250 qualified submissions this year and 1,411 papers are accepted (about 43.4% acceptance rate). Our paper is honored to be chosen as one of the 144 oral papers (about4.4%) in this conference.
The experience of Ting-Wei Chang: It was a pity that the conference was changed to be held online due to the pandemic, including pre-recording introduction videos, one-day online brief introductions, and QA sessions. ICPR defined the session time schedule in order to meet as much as possible the differences in the time zone of the participants. Participants may join the session they are interested in according to the schedule. Although making presentations in English before many scholars is very stressful, I still feel pleasure when I was able to answer their questions and listened to their suggestions. The online conference was not as boring and serious as I have imagined. On the contrary, many hilarious motivational speakers presented their amazing research in a casual way. The way they presented at the conference is worth learning. Attending the conference is a memorable experience to me. While I studied many of the advanced ideas, I have learned how to present my ideas well and help others understand my ideas more effectively.