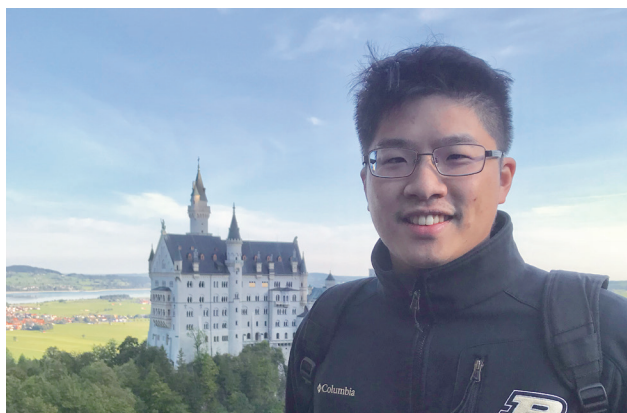# 陳奕廷老師：
做自己熱愛且能夠讓世界變得更好的事

文／翁健棋

本次資訊人有幸邀請到本院資訊工程學系，專精智慧駕駛系統、電腦視覺、人工智慧與機器學習等領域的陳奕廷助理教授，擔任受訪嘉賓。希望能藉由陳奕廷老師豐富多元的出國求學、工作經驗分享，供同為資訊人的資工系同學們做為未來求學規劃、職涯發展參考。從最初求學申請時，對於是否投身研究的迷惘與考量，談到求職時的職場探索經驗與後續任職師資的教學理念，且聽陳老師分享這段學職涯轉換的心路歷程。

迷惘不可避免，摸索別忘把握機會！

於大學四年級時，就讀本校電子工程學系的陳奕廷老師就已開始思考未來的發展規劃。考量到出國求學必要之申請資料、鑑定考試的準備時間，陳老師決定把握住前往伊利諾大學香檳分校的交換機會，以其適應狀態作為未來是否長期出國留學，攻讀碩博士學位的選擇依據。憶起出發前往交換前，交大恰巧邀請住伊利諾大學香檳分校從事模式辨識、電腦視覺與人機交互的黃煦濤教授前來演講，演講內容充分激發陳老師的興趣與熱忱，他立刻主動寫信向黃教授詢問是否可以參與研究專案。在獲得肯定答覆後，陳奕廷老師便以新成員的身分加入研究團隊，協助專題計畫進行。

「我覺得這是一個很重要的契機，讓我開始對『研究』這件事情有想法，知道自己在做什麼。」初次的研究經驗累積，與其所帶來之成就感，為陳奕廷老師在探索自我、了解自身未來規劃等面向帶來極大的幫助。該次的專題產製經驗也讓陳老師下定決心，將原先的「出國交換探索、考慮攻讀碩士」等階段性目標延伸規劃，並修訂「申請博士班」為最終目標。儘管摸清了努力方向，後續也順利申請上博士班，陳老師卻面臨了多數國際學生都會遇到的難題——高額消費與學費所帶來的負擔，在沒有金援的情況下，頂著極大的金錢壓力度過第一個學期。

為何研究？藏不住的熱忱會告訴你

談及「研究動力」與「贊助金援」取捨的兩難，陳奕廷老師回想起在求學第二學期時，雖成功得到獎助學金，但研究主題卻與自身興趣有所出入，在深入探索時總會少了幾分熱忱，這樣的困境直到博士班倒數第二年，修習「電腦視覺」課程之後才有所改善。好不容易找尋到極具探索熱忱之研究領域，但考量到畢業時限在即，面對「等待機會從事相關研究」或「進入職場尋找相關工作」的二選一難題，陳老師選擇了前者，在大學同學牽線下，加入了美國加州大學美西德分校楊明玄教授的電腦視覺研究團隊。憶起當時自己在自薦信中提到「我不管有沒有獎助金，我就是要去做！」陳老師認為，或許正因毫不掩飾嶄露「真的想做」的熱忱與決心，才有機會打動楊教授，獲得貴人相助，實踐所學，繳出兩項研究計畫成果。

緊接著，在多次研究與實習經驗累積過程中，陳奕廷老師逐步摸索出自身投身研究的理由與目標。在美國本田研究所時，陳老師從先進駕駛系統專案中意識到，車禍事故所引發之社會問題有迫切解決的需求，而自身所學之實踐正是解方之一；「電腦視覺」不單可當作研究興趣，其延伸應用如智慧駕駛系統、輔助機器人等技術更可為交通安全、居家照護等社會議題做出貢獻。「運用所學，為有需要的人提供協助，改變並解決現存之問題，或許正是我一直以來追尋的研究目標與意義。」這是陳老師面對「為何研究」的問題思考，透過親身經歷所得出，簡單卻富含深意的答案。

於訪談末段，陳奕廷老師分享了工作最後一年帶實習生的特別經驗。擔任 mentor 期間，陳老師能充分感受到實習生對研究的迷茫好似當年的自己；他認為，若有人能在此時以過來人的身分，提供引導並給予自信，對於研究新鮮人定有極大助益，這也正是陳老師選擇投身教職的原因之一。結合各項經歷，陳老師以自身體悟勉勵同學們：「主動積極去追尋自己興趣的同時，做自己熱愛且能夠讓世界變得更好的事！」期待莘莘學子們能充分探索自我，投注熱忱於所學，貢獻並造福社會！

An Interview with Dr. Yi-Ting Chen:
Pursuing Your Passion and Make This World a Better Place

We are very honored to invite Dr. Yi-Ting Chen, an assistant professor of the College of Computer Science who specializes in intelligent driving systems, computer vision, artificial intelligence, and machine learning in this interview. We hope to share Dr. Chen's diversified study and career experiences to students of our college for career planning as a great reference. From having doubts to think about whether to pursue a research career, to the experience of job application and his teaching philosophy, Dr. Yi-Ting Chen shared his ups and downs in this journey.

It is normal to feel confused, but don't forget to seize your opportunity

When majoring in Electrical Engineering in his senior year of NCTU, Dr. Chen had already started thinking about his future. Considering the time taken to prepare for application documents and examinations to study abroad, he decided to apply for a short-term exchange program at the University of Illinois at Urbana-Champaign. Through this opportunity, he wanted to see if he was able to fit in and can further pursue master's and doctoral degrees abroad in the future. Just before he left for his exchange program, he recalled that coincidentally Prof. Thomas S. Huang, a professor at Illinois at Urbana Champaign was invited to give a lecture at NCTU. Dr. Huang was one of the leading figures in pattern recognition, computer vision, and human computer interaction. Dr. Chen was deeply inspired by Dr. Huang's lecture so he immediately wrote to Professor Huang to ask if he could participate in the research project. After receiving a positive answer, Dr. Yi-Ting Chen joined the research team in the project team directed by Dr. Huang. "I think this was a turning point for me to start to think about the meaning of research and what I was doing." Not only gaining a sense of self-achievement from research experiences, conducting research also helped him to explore and plan for his future. This experience gained from the research project also made Dr. Chen determined to extend his plan from a short-term exchange and master's degree to a doctoral program application as his final goal. Although Dr. Chen made up his mind and successfully enrolled in the doctoral program, he soon faced a challenge that most international students encountered-the burden of high living costs and expensive tuition fees. He had a rough first semester under enormous pressure without financial support in his doctoral study.

What is the purpose of research? Your passion will answer you

When it comes to the dilemma of choosing between the passion to conduct research or receiving an assistantship, Dr. Chen shared his memory during his second semester of doctoral study. Although he did successfully receive an assistantship, he was not very motivated in the research topic he was conducting. This situation did not improve until the second last year of his doctoral study when taking the course, Computer Vision, in which he found a passion for research. Just not long after he discovered his passion, Dr. Chen soon faced another challenge, which was that it was about time for him to graduate from doctoral study. He needed to decide whether to keep waiting for an opportunity to do research that he was very interested in or enter the job market in a related field. In the end, he chose the former option and joined Prof. Ming-Hsuan Yang's computer vision research team at the University of California at Merced. In his cover letter to apply for a position at Dr. Yang's lab, he wrote "I don't care if I have an assistantship or not, I just want to do it!". Perhaps the reason why he was recruited by Dr. Yang and earned this opportunity was because of his strong determination. With this firm and positive attitude, Dr. Chen was able to publish two papers while working in Dr. Yang's research team.

Dr. Yi-Ting Chen gradually found the reasons and goals for his devotion to research from many research and internship experiences. When working at the Honda Research Institute USA, Dr. Chen realized he could put his expertise into solving real problems. For instance, he found that there was an urgent need to solve problems caused by car accidents when exploring advanced driver assist system projects. "Computer Vision" could be more than a research interest, moreover, it can be applied in intelligent driving systems, and assistive robots to contribute to traffic safety and home-care services. "Using what I learned and providing assistance to people in need to solve existing problems is my goal behind my passion in research. This is a simple yet meaningful answer to the question of "what is the purpose of research", and Dr. Chen conveyed the messages through his personal experiences.

At the end of the interview, Dr. Chen shared his experience when leading interns in the final year in Honda Research Institute USA. When guiding interns as a mentor, he felt that those interns' circumstances were very similar to him back then, such as feeling confused about their future and research. He believes that if someone could provide guidance based on their perspective as an experienced researcher, it would be very helpful for younger generations. It was also the reason why he devoted himself to teaching at the Department of Computer Science at NYCU. Now He often encourages his students to "actively pursue their passion and do what they love to make the world a better place." He hopes that students can explore and devote themselves fully to their studies and give what they have to this society.