高孟駿老師:關懷社會、貢獻所學



本次資訊人有幸邀請到本院資訊工程學系, 以基礎組合最佳化問題之近似演算法設計分析、 可近似困難度研究領域為專長的高孟駿副教授, 擔任受訪嘉賓。希望能藉由高孟駿老師豐富多元 的旅外求學、學術研究經驗分享,供同樣流淌資 訊人血脈的資工系同學們作為生涯規畫參考。高 老師投身極具挑戰性的理論研究領域數載有餘, 相信其經歷與心境可協助引導對理論研究有熱情 的學子們,順利於求學過程中尋得理想的發展方 白。

熱忱與興趣,是化身資訊研究者的最大動力

談及投身資訊領域,成為理論研究工作者之 契機,高孟駿老師憶起小學第一次接觸電腦設備 時,便對 DOS 環境裡各式奇妙又強大的工具感 到震撼,同時也被各種有趣好玩的電腦遊戲所吸 引。緊接著於高中求學階段,高老師偶然接觸到 程式競賽,於賽前練習和實際參賽時發現,持續 的解題思考、嘗試學習、了解各種新奇演算法的 過程,為其帶來很大的樂趣和啟發;也正因如此, 整理吸收先備知識、實作練習等競賽所需事務成 為了高老師高中時的生活重心。

而後,高老師順利考取感興趣之目標科系, 進入臺灣大學資訊與工程學系就讀,儘管參與競 賽的機會減少,其對數學及解題的熱愛仍舊不 減,在眾多師長與前輩的啟發下,選擇帶著濃厚 的熱忱與興趣,投身國內相對小眾的理論研究領 域,將自身所受之紮實訓練、所具之數學天賦實 踐並貢獻於研究成果中。

文/翁健棋

學思並重、打穩基礎,理想藍圖自然浮現

高孟駿老師曾於就讀博士班的期間,前往德 國卡爾斯魯爾理工大學(Karlsruhe Institute of Technology)進行為期兩年的研究訪問。回憶起 該段時間之經歷,除了充分體會到國內外文化與 價值觀差異之衝擊,同時高老師也深刻感受到, 自身對理論研究領域內眾多基礎工具的掌握程度 有諸多不足之處。

「這不是天賦上的差異,卻成為我想做出 更好的研究的極大阻礙,限制我只能做原本就會 做的事情。」透過落實至聖先師孔子「學而不思 則罔,思而不學則殆。」學、思並重的求學態 度,經反覆思考後,有所感悟的高老師選擇更加 努力理解並內化學習過程所需應用到之基礎理論 工具。伴隨外在學習方向的調整與內在認知的轉 换,前段時間所打下的紮實基礎,給予高老師充 足的自信面對同領域內最前端的研究成果;也使 其重新開始相信,自身具備在最好的研究問題上 做出貢獻的能力。

同樣作為資訊領域教育體系所培育之學生, 高孟駿老師以過來人身分期許本院資工系的同學 們,能把握並充分利用身邊充沛的教育資源、優 質的學習環境,以造福、貢獻社會為己任,擦亮 「國立陽明交通大學資訊工程學系」的招牌,努 力躋身產學研各界龍頭,引領技術革新,共創未 來發展榮景。同時胸懷「關懷社會、貢獻所學」 之思想,將求學時受挹注之資源、福利回饋於社 會,促成溫暖正向力量的循環。高老師亦同時以 自身指導老師之座右銘「件件工作,反映自我; 凡經我手,必為佳作。」勉勵自己,期許自己未 來所發表的論文內容,皆是經反覆雕琢、去蕪存 **菁,優質且紮實的研究成果。祝福高孟駿老師能** 順利實踐自我所設之目標!

Professor Mong–Jen Kao: Caring for Society and Applying what We Have Learned

We are deeply honored to have Associate Professor Mong-Jen Kao join us for this interview. Professor materialize. Kao, from the Department of Computer Science, While pursuing his doctorate, Professor Gao embarked specializes in approximation algorithms, combinatorial on a two-year research visit to Karlsruhe Institute of optimizations, algorithm design and analysis, and Technology in Germany. Looking back on that period, geometric computing. By leveraging the wealth of he not only encountered cultural differences and diverse experiences gained from Professor Gao's value disparities between his home town and abroad studies and academic research abroad, we hope but also became acutely aware of the numerous to provide valuable career guidance for our fellow deficiencies in his mastery of fundamental tools within students in the department who share the same the field of theoretical research. passion for the field of computer science. For years dedicated to rigorous theoretical research, Professor "It's not a matter of talent difference, but rather Gao has immersed himself in highly challenging a devastating hindrance that prevents me from academic pursuits. We believe that his invaluable pursuing better research and confines me to tasks experiences and unique perspectives can serve as that I am already familiar with." By embracing the guiding beacons for students who are passionate learning philosophy of Confucius, the great ancient about theoretical research, helping them find their Chinese teacher who emphasized the importance proper path for personal growth throughout their of thoughtful learning in his famous quote, "Learning academic journey.

Passion and interest serve as the primary motivators for researchers in the field of **Computer Science.**

When Professor Gao talked about the moment that he decided to dive into the field of computer science and pursue a career as a theoretical researcher, he recalled that he used a computer in elementary school for the first time and was amazed by the various fascinating and powerful tools within the DOS environment. He was also drawn to various interesting and enjoyable computer games. During his time in high school, Professor Gao happened to participate in programming competitions. By engaging in precompetition practice and actively participating, he experienced the profound delight and inspiration that came from continuous problem-solving, experimental learning, and the exploration of diverse, innovative algorithms. Consequently, organizing and assimilating fundamental knowledge, as well as practical exercises for competitions, became the central focus of Professor Gao's high school years.

Afterward, Professor Gao was admitted to the Department of Computer Science and Information Engineering at National Taiwan University, embarking on his chosen academic path. Despite fewer opportunities to participate in competitions, his passion for mathematics and the art of problemsolving remained unwavering. Motivated by numerous seniors and mentors, he chose to immerse himself with a profound passion and keen interest in theoretical research that was a relatively niche field in Taiwan. With the expectation to leverage his comprehensive training and innate mathematical ability, he aims to make significant contributions to his research.

Give balanced importance to learning and critical thinking and build a strong foundation, and then the blueprint for self-fulfillment will effortlessly

without thought is labor lost; thought without learning is perilous," Professor Gao adopts a harmonious approach to learning and thinking. Guided by profound insights, he diligently strives to comprehend and internalize the essential theoretical tools during his learning process. As Professor Gao adjusts the external direction of his learning and undergoes a shift in the internal cognition, the strong groundwork established in the past equips him with sufficient confidence to deal with the cutting-edge research achievements in his field. Furthermore, this renewal of belief reignites his confidence in his self-efficacy to make valuable contributions to the most outstanding research inquiries.

Professor Gao, as a former student, has high expectations for the students of the Department of Computer Science in our college. He hopes that they can fully utilize the abundant educational resources and excellent learning environment available to them. It is their responsibility to benefit society while enhancing the esteemed reputation of the Department of Computer Science at National Yang Ming Chiao Tung University. They should strive to become leaders in industry, academia, and research, pioneer technological innovation and collectively shape a prosperous future. Simultaneously, he hopes that the students will hold the mindset of "caring for society and applying what we have learned," and give back the resources and benefits they have gained during their studies to the community. This will cultivate a cycle of warmth and positive influence. Inspired by his advisor's motto, "Every task is a reflection of myself; everything I undertake must be a masterpiece," Professor Kao expects that the content of his future research papers will undergo meticulous refinement to present high-quality and substantial research findings without any redundancy. We express our best wishes to Professor Mong-Jen Kao for the successful realization of his goals!