

# 林盈達教授、曾新穆教授 榮獲科技部傑出研究獎

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科技部為獎勵研究成果傑出之科學技術人才，長期從事學術或產學研究，提升台灣學術、產學研究水準，增強國家科技實力，特別設立「傑出研究獎」。本院林盈達教授與曾新穆教授雙雙榮獲科技部 108 年度傑出研究獎。林盈達教授鑽研網路相關題材，團隊研發出自動測試平台 ACTS 和 5G 測試工具 ORANge，目前已從交大技轉智慧財產權，由執行團隊共同創立交大首間衍生研究服務公司「詮隼科技」，為國內的次世代電信樹立自動化測試的典範。曾新穆教授專攻巨量資料，他與科技部的 iDeepCare 計畫，結合機器學習研發智慧型深層健康照護系統，與三軍總醫院建立大腸息肉 AI 辨識模型，輔助醫師辨別息肉性質，也和臺北榮民醫院合作心律不整預警系統，預測布魯蓋達氏症候群心電圖表現。兩位教授都是再度榮獲傑出研究獎，其研究成果皆對台灣產業及社會有莫大貢獻，以下是得兩位傑出研究獎得獎感言：

## 林盈達教授：學術研究是終身志業



距離上次獲頒傑出研究獎又過了三年，最大產出應該是由網路測試中心衍生出一家新創公司，初期產品為自動化測試平台 ACTS 與 5G 測試工具 ORANge。從提供網通廠商測試服務到測試工具，我深知台灣高科技產業也需要升級，只有透過測試才能把產品從消費性市場提升至企業級與電信級市場，經過多年研發累積終於把技術能量移轉至產業界。

論文發表是終身志業，只是模式可以從基本

師徒二人制進化到二師一徒或二師二徒交叉共同指導，甚至二師想一系列題目找其他師徒合作，也就是可以從自備學生的種田模式擴充到找別人學生的打獵模式。因為擔任編輯、議程委員與 IEEE Distinguished Lecturer，及平均每年在國外演講 10 場，所以認識許多同領域的各國學者，得以透過合作擴大了研究的產出與視野。

得獎後要忘掉，還要假裝自己只是助理教授，以有動力但沒壓力的態度繼續努力，看自己還能學到與做到什麼。

## 曾新穆教授：做研究是一件長遠又迷人的事



再次獲得科技部傑出研究獎之殊榮個人深感榮耀，要感謝許多師長前輩的提攜支持以及學校與系上提供最好的研究環境；當然，也要謝謝所有傑出的合作夥伴以及聰明又勤奮的學生們，一

起投注心血創造出精彩的成果！

有人問我說如何做研究才能得獎？做研究是一件長遠又迷人的事，過程雖然艱辛，但充滿了柳暗花明的驚喜：每個創新火花的激盪、每個困難點的突破、從最初的抽象意念到實際的具像化，點滴的累積可以帶我們窺見無限的可能性，引領至意想不到的精彩境地！

所以，我想得獎不是目的，如何找到自己的興趣，激發出熱情並鏗而不捨的沉潛於中，至終能破繭而出，驀然回首原已滴水穿石、積沙成塔，會心一笑自己與世界已有所不同，又至另一新境，這才是最大的意義與價值。與大家共勉之！

# Professor Ying-Dar Lin and Professor Vincent S. Tseng Were Awarded the Outstanding

The "Outstanding Research Award", instituted by the Ministry of Science and Technology (MOST), honors scientific and technological talents having outstanding research performance, thereby encouraging them to devote themselves to academic and industry-academic research to improve the quality of Taiwan's research in the international community, and ultimately boost the country's technological capacity. Dr. Ying-Dar Lin and Dr. Vincent S. Tseng, professors of the College of Computer Science, both received 2019 Outstanding Research Award from Ministry of Science and Technology. Dr. Ying-Dar Lin delved into networking topics and his team developed automatic test platform ACTS and 5G test tool ORANge. The intellectual property rights have been transferred from National Chiao Tung University to O'Prueba technologies Inc at present. O'Prueba Technology Inc., co-founded by Dr. Lin and his team, is not only the first spin-off research service company of National Chiao Tung University but also a role model of automatic test for next-generation mobile communication in Taiwan. In addition, Dr. Vincent S. Tseng is a well-recognized expert in big data analytics. Dr. Tseng and his team at NCTU executed the iDeepCare project sponsored by MOST to develop intelligent disease risk prediction system by machine learning, establish an AI identification model for assisting physicians to detect colorectal polyps with the Tri-Service General Hospital, and cooperate with Taipei Veterans General Hospital to develop an early Warning System for Cardiac Arrhythmias and estimate the EGG pattern of Brugada syndrome. The acceptance speeches by both professors are as follows:

## Professor Ying-Dar Lin: Academic research is a lifetime mission

Ever since the latest Outstanding Research Award I have received 3 years ago, the biggest accomplishment is O'Prueba, a spinoff from NCTU Network Benchmarking Lab. The early products are automatic test platform ACTS and 5G test tool ORANge. By providing network communication equipment vendors testing tools and services, I am deeply aware that Taiwan's high-tech industry also needs an upgrade. Through product testing, manufacturers are able to improve product quality, thereby upgrading consumer-grade products to enterprise-grade and telecom-grade products. After many years of research and design, we finally transfer our technology capacity to the industry. Academic publishing is a lifetime mission. However,

the collaboration model could evolve from the basic two-person style, one mentor and one apprentice, to two mentors and one apprentice, or two mentors and two apprentices for joint advising. Furthermore, two mentors could collaborate with other mentor-apprentice groups, which means that mentors could expand from the farming model of having their own students to the hunting model of looking for other students. Since I, as an editor, agenda committee member, and IEEE distinguished lecturer, give 10 speeches abroad a year on average, I know many scholars around the world in the same field so as to expand the vision and outcomes of research through collaboration.

After receiving the award, you have to forget it and pretend that you were still an assistant professor, keep working hard with a motivated but pressure-free attitude, and see what else you can learn and do.

## Professor Vincent S. Tseng: Conducting research is a long-lasting and fascinating thing

It is truly an honor to receive the outstanding research award of MOST again. I would like to thank many faculty and seniors for their support as well as the department and the university for providing the best research environment. Of course, I also want to express my gratitude to all incredible co-workers as well as smart and hardworking students for the remarkable performance we fueled together.

Someone asked me the strategy to win awards? Conducting research is a long-lasting and fascinating thing. Although the process may be full of struggles, you will be excited to see there is always a way out, such as the excitement of each innovation spark, the breakthrough of each difficult point, as well as the flow from initial abstract idea to actual visualization. The assortment of bits and pieces illustrates the unlimited possibilities, thereby leading us to a wonderful place beyond the imagination!

Therefore, I think winning the prize is not the goal. I would like to use the following words as our mutual encouragement: the greatest significance and value would be how to find my interest as well as fuel enthusiasm and perseverance, and eventually the butterfly would break out of the cocoon. Looking back after all passed, you will realize the true meaning of "constant dropping wears away the stone" and "every great thing is nothing but a lot of little ones" so that you can smile at yourself knowing that the world and yourself might have advanced to a new realm.