

Professor Shuo-Yan Chou (周碩彥)

Research projects (since 2007)

1. **2018-21 Co-PI**, "Taiwan Building Technology Center," Ministry of Education. (US\$7,000,000; sub-project US\$331,000)
2. **2018-21 Co-PI**, "Center for Cyber Physical System Innovation," Ministry of Education. (US\$4,200,000; sub-project US\$400,000)
3. **2019-20 PI**, "Renewable Energy Power Generation Prediction and Digital Twin Platform Development," National Energy Program III, Ministry of Science and Technology. (US\$170,000)
4. **2019-20 PI**, "Analysis and Optimization of Collaborative Operation Planning for Parts-to-Picker Multi-robot Automatic Warehouses," Ministry of Science and Technology. (US\$16,000 and US\$30,000 for post-doc)
5. **2019-20 PI**, "Development of Advanced AI-based Smart Energy Equipment and Management System," Ministry of Science and Technology. (US\$30,000)
6. **2019 PI**, "WISEPssS Innovation Competition," Advantech. (US\$10,000)
7. **2019 PI**, "Internet of Things and Blockchain Facilitated Shared Economy," TUL. (US\$65,000)
8. **2019 PI**, "Intelligent Internet of Things Lab Project," Ministry of Education. (US\$120,000)
9. **2019 PI**, "Space Sharing Enabling Digital Technologies," Architecture and Building Research Institute. (US\$30,000)
10. **2018-19 Co-PI**, "Taiwan Building Technology Center," Ministry of Education. (US\$3,400,000)
11. **2018-19 Co-PI**, "Center for Cyber Physical System Innovation," Ministry of Education. (US\$2,000,000)
12. **2018-19 PI**, "Analysis and Optimization of Intelligent AGV Systems for High-frequency Order Picking Warehouses," Ministry of Science and Technology. (US\$22,000 and US\$30,000 for post-doc)
13. **2018 PI**, "Improvement on the Smart Building Certification Review Processes," Architecture and Building Research Institute, Ministry of Interior. (US\$70,000)
14. **2018 Co-PI**, "Establishing Energy Conservation International Cooperation Platform among Taiwan, Singapore and UK," National Energy Program II, Ministry of Science and Technology. (US\$130,000)
15. **2018 Co-PI**, "High-level Researcher Cultivation," Ministry of Education.

(US\$100,000)

16. 2017-18 Co-PI, "Innovative Heat Insulation Solar Glass for Zero Energy Buildings," Ministry of Science and Technology. (US\$1,300,000)
17. **2017-19 PI**, "Research and Cooperation on the ICT Infrastructure for Supporting Smart City Development," Ministry of Science and Technology. (US\$260,000)
18. **2017 PI**, "Smart Internet of Things Applications," Model University of Science and Technology Program. (US\$16,000)
19. **2017 PI**, "Enabling Smart City Sustainable Applications with Cyber Physical Systems," Taiwan Building Technology Center. (US\$80,000)
20. 2016-17 Co-PI, "Sustainable Smart Campus Development Initiative," Ministry of Interior. (US\$1,300,000)
21. **2016 PI**, "IOT-based Company Vehicle Management Platform Development," Far EastTone Telecom. (US\$15,000)
22. **2016-19 Co-PI**, "Key Technologies and Intelligent Services of Industry 4.0 with Integration of IoT and Cloud Computing," Ministry of Science and Technology. (US\$20,000)
23. **2016 PI**, "Industry 4.0 Human Resource Development Study for Taiwan," Industrial Technology Research Institute. (US\$16,000)
24. **2016 PI**, "MOOC course on Introduction to Industry 4.0," Delta Electronics Foundation. (US\$32,000)
25. **2016 PI**, "Hosting Preliminary Run of TiC100 University Innovation Competition," Advantech. (US\$11,000)
26. **2016 Co-PI**, "Research Cooperation Platform with European Union on Building Energy Conservation," National Energy Program II, Ministry of Science and Technology. (US\$85,000)
27. **2015-18 PI**, "Research on Revenue Management Models for Private Parking Utilization based on Shared Mobility Strategies, MOST. (US\$60,000)
28. **2015-16 Co-PI**, "Smart City Case Study in Taipei," Royal Institute of Chartered Surveyors, UK (£5,000)
29. **2012-16 PI**, "Development of IoT Applications for Energy, Manufacturing and Logistics Scenarios," MOE Model S&T University Program. (US\$350,000)
30. **2011-16 PI**, "Towards an IoT Framework for Intelligent Building," Taiwan Building Technology Center. (US\$500,000)
31. **2015 PI**, "Smart Logistics for Industry 4.0," MOE Model UST. (US\$15,000)
32. **2015 PI**, "iBeacon Location-based Exhibition Service System Development," AR Media Asia. (US\$9,000)
33. **2015 PI**, "Study and Preliminary Proposal for IOT Exhibition," National

- Science and Technology Museum. (US\$10,000)
34. **2015** **Co-PI**, "Intelligent Logistics System," Foxconn Logistics. (US\$100,000)
 35. **2015** **PI**, "Hosting Preliminary Run of University Innovation Competition," Advantech. (US\$7,500)
 36. **2015** **PI**, "Exchange of Scientists under Agreements of Scientific Cooperation between Australian Academy of Science and Ministry of Science and Technology of Taiwan," MOST. (US\$5,000)
 37. **2014-15** **PI**, "Innovative 3D Photographing Platform Design and Construction," Jordan Design. (US\$50,000)
 38. **2014-15** **PI**, "IOT-enabled Private Parking Utilization Systems: Technology Framework and Optimization Engine," Ministry of Science and Technology. (US\$23,000)
 39. **2014-15** **PI**, "Research on Cognitive and Technology Enablers for Shared Mobility," Hanyang University, South Korea. (US\$10,000)
 40. **2014** **PI**, "Establishing Remote Chemotherapy Prescription Preparation Cross-check and Barcode Systems," TSGH-NTUST Cooperative Program. (US\$8,000)
 41. **2013-16** **PI**, "NTUST IoT University-Industry Consortium," NSC. (US\$210,000)
 42. **2013-14** **PI**, "O2O Application Scenarios for YouBike," Microprogram. (US\$7,000)
 43. **2013-14** **PI**, "Research on ROI Analysis Models for Renewable Power Generation Systems," NSC. (US\$22,000)
 44. **2013** **PI**, "Exchange of Scientists under Agreements of Scientific Cooperation between Australian Academy of Science and National Science Council of Taiwan," NSC. (US\$4,500)
 45. **2013-14** **Co-PI**, "Development Innovative Labs: Hackerspace + extreme learning in NTUST school of management," MOE. (US\$28,000)
 46. **2012-13** **PI**, "Data Transmission and ROI Model Development for Solar Panel Power Generation System," NSC. (US\$23,000)
 47. **2012-13** **Co-PI**, "Research on the Improvement of the 2nd Generation e-Invoice," Price Waterhouse Cooper. (US\$300,000)
 48. **2011-13** **PI**, "Construction of Intelligent Context-aware Environment for Internet of Things," NSC. (US\$38,000)
 49. **2011** **PI**, "Development of Intelligent Storage Shelf for Controlled Medication," Tri-Service General Hospital. (US\$10,000)
 50. **2011** **PI**, "Higher Education Export: Cultivating Southeast Asia Project Office," MOE. (US\$150,000)
 51. **2011** **PI**, "Organizing Global Science Leaders Forum," NSC. (US\$500,000)

52. **2011** **PI**, "International Cooperation & Exchange Program," MOE.
(US\$50,000)
53. **2010-11** **PI**, "Cooking Project with SUPSI, Switzerland," NSC. (US\$12,000)
54. **2010-11** **PI**, "Study of Impact of Information Visibility to Logistics," NSC.
(US\$20,000)
55. **2009-11** **PI**, "Applying RFID for Campus Security Integration and
Enhancement," MOE. (US\$300,000)
56. **2009-10** **PI**, "Study on Managerial Impact from Information Visibility," NSC.
(US\$19,000)
57. **2009-10** **PI**, "Key RFID Technology RD and Application," Ministry of
Economic Affairs. (US\$430,000)
58. **2009** **Co-PI**, "RFID-enabled Applications on University Campus and
Surrounding Community," Ministry of Economic Affairs. (US\$70,000)
59. **2008-09** **Co-PI**, "Applying RFID for Campus Security Integration and
Enhancement I," MOE. (US\$190,000)
60. **2007-11** **Co-PI**, "RFID Teaching and Research Lab Setup Project," MOE.
(US\$1,000,000)
61. **2007-09** **PI**, "Study of Collaborative Planning for Supply Chains under Short
Product Lifecycle Demand Models," NSC. (US\$40,000)