國立中興大學電機資訊學院

院長候選人登記應繳交表格及相關證件清單

(請依序逐項檢齊----**所送影本均請候選人簽章以資確認**)

姓名：　蔡清池　　現職單位及職稱：電機系特聘教授 I

☑國立中興大學電機資訊學院院長候選人資料表。(正本)

☑教授證書影本。

☑資料表所載明資料之相關學經歷證明文件。

☐候選人推薦表（自行登記參選者免附推薦表）。

☑中華民國身分證或護照影本。

☑近五年於列名 JCR 之國際期刊發表論文〔含發明專利、新品種育成、技術移轉等成果〕三篇(件)(第一作者或通訊作者)以上者。

☑最近五年曾主持三年以上國家科學及技術委員會研究型計畫者。

☐最近五年曾獲校級教學或服務特優獎勵者。

☑其他有助於審查資格之資料。

☑未曾因違反學術倫理而受校教師評審委員會處分。

候選人親筆簽名：蔡清池

113年4月17日

國立中興大學電機資訊學院院長候選人資料表

壹. 個人基本資料

姓名	別號	性別	出生年月日	國籍	電話	傳真
蔡清池		南	民國50年4月[redacted]	本國籍	公：[redacted] 宅：[redacted]	公：[redacted] 宅：
通訊處：台中市南屯區[redacted]						
E - mail：cctsai@nchu.edu.tw						
個人網頁：						

	服務機關名稱	專兼任	職稱（職級）	到職年月日
現職	國立中興大學	專	特聘教授 I	1992 年 8 月 1 日

	學校名稱	院系所	學位名稱	領受學位年月
大學以上	美國西北大學博士	電機工程學系	博士	1991 年 9 月
	國立交通大學碩士	控制工程研究所	碩士	1986 年 6 月

	服務機關名稱	專兼任	職稱（職級）	任職起迄年月
經歷	國立中興大學電機系	專任	特聘教授 I	2023 年 8 月至今
	國立中興大學電機系	專任	特聘教授 I	2021 年 8 月至 2023 年 7 月
	國立中興大學電機系	專任	特聘教授 I 兼研發長	2021 年 2 月至 2023 年 7 月
	國立中興大學電機系	專任	特聘教授 I 兼副研發長	2019 年 8 月至 2021 年 1 月
	國立中興大學電機系	專任	特聘教授 II	2014 年 8 月至 2019 年 7 月
	國立中興大學電機系	專任	特聘教授 II 兼系主任	2012 年 8 月至 2014 年 7 月

註：1.請附最高學歷及教授或相當於教授資格之證件影本。

2.個人網頁資料之正確性由候選人負責確認。

候選人親筆簽名：蔡清池

貳. 學術獎勵及榮譽事項(請附相關證件影本)

1.President, International Fuzzy Systems Association (IFSA), 2021/6-2023/8
2.2022 中華民國模糊學會會士 (TFSA Fellow)
3.2021 (110 年度) 台灣機器人學會卓越服務貢獻獎
4.台灣機器人學會傑出機器人工程獎章，2020 年 8 月。
5.IEEE SMC 學會 BoG(理事)，2022 年 1 月至 2024 年 12 月 31 日
6.2019 科技部未來科技突破獎
7.國立中興大學特聘教授 I，2017 年 8 月 1 日至 2023 年 7 月 31 日
8.國立中興大學副研發長，2019 年 8 月 1 日至 2021 年 1 月 31 日
9.國立中興大學研發長，2021 年 2 月 1 日至 2021 年 7 月 31 日
10.109 年度科技部大專生創作指導獎
11.107 年度(2018)科技部傑出研究獎，2019 年 5 月。
12.台灣機器人學會會士，2018 年 11 月。
13.2017 IEEE 學會會士 (IEEE Fellow)，2017 年 1 月
14.國立中興大學特聘教授 I，2019 年 8 月 1 日至 2021 年 7 月 31 日
15.台灣機器人學會第五-六屆理事長，2016 年 1 月至 2020 年 1 月
16.2015-2025 IEEE SMC Representative of the IEEE Nanotechnology Council。
17.Steering Committee, Asia Control Association, 2017 年至 2019 年
18.President-Elect, IFSA, 2019/6-2021/8
19. 國立中興大學特聘教授II，2017年8月1日-2019年7月31日

候選人親筆簽名：

A.Journal Papers:

[1] Ching-Chih Tsai, Ching-Fu Hsu, Chung-Wei Wu, and Feng-Chun Tai, "Cooperative Localization Using Fuzzy DDEIF and Broad Learning System for Uncertain Heterogeneous Omnidirectional Multirobots," *International Journal of Fuzzy Systems*, vol.21, no.8, pp. 2542-2555, 2019. (SCI).

[2] Ching-Chih Tsai, Ching-Fu Hsu, Zen-Chung Wang, and Feng-Chun Tai "Potential-Field-Based Distributed Formation Control Using Consensus Algorithms and PSO-RGA for Small-Scale Unmanned Multi-Helicopters," *iRobotics*, vol. 2, no. 1, pp.18-30, March 2019.

[3] Ching-Chih Tsai, Chien-Cheng Yu, and Chia-Ta Tsai, "Adaptive ORFWNN-based predictive PID control," *International Journal of Fuzzy Systems*, vol. 21, no.5, pp. 1544-1559, 2019. (SCI).

[4] Ching-Chih Tsai, Chien-Cheng Yu, Shih-Min Hsieh, and Feng-Chun Tai," Intelligent Adaptive Simultaneous Tracking and Stabilization Using Fuzzy Wavelet Networks for a Wheeled Inverted Pendulum," *iRobotics*, vol. 2, no. 1, pp.1-12, March 2019.

[5] Hsiu-Chen Tsai and Ching-Chih Tsai," Self-Piloting of an Indoor Quadrotor Using Deep Reinforcement Learning," *iRobotics*, vol. 2, no. 2, pp.19-25, June 2019.

[6] Po-An Wei, Ching-Chih Tsai, and Feng-Chun Tai," Autonomous Navigation of an Indoor Mecanum- Wheeled Omnidirectional Robot Using SegNet," *iRobotics*, vol. 2, no. 2, pp.19-25, June 2019.

[7] Ching-Chih Tsai, Chun-Chieh Chan, Chun-An Lin, and Feng-Chun Tai," EtherCAT-based Impedance Control and Force Compliance Teaching of a 6-DOF Industrial Robotic Manipulator," *iRobotics*, vol. 2, no. 3, pp.1-10, September 2019.

[8] Hsiu-Chen Tsai and Ching-ChihTsai, " Goods recognition using improved tiny YOLOv3 for an autonomous quadrotor in an indoor warehouse environment," *iRobotics*, vol. 2, no. 4, pp.15-21, December 2019.

[9]Po-An Wei and Ching-Chih Tsai, " RGB-D SLAM of an Indoor Omnidirectional Mobile Robot with an Improved RRT," *iRobotics*, vol. 2, no. 4, pp.29-34, December 2019.

[10] C. C. Tsai, F. C. Tai and Y. J. Kuo, " Robotic Farming System Using Collaborative UAV and UGV," iRobotics, vol.3, no.3, pp. 8-15, 2020.

[11] Ching-Chih Tsai, Ching-Fu Hsu, Xing-Cheng Lin, and Feng-Chun Tai, "Cooperative SLAM Using Fuzzy Kalman Filtering for a Collaborative Air-Ground Robotic System," *Journal of the Chinese Institute of Engineers*, vol.43, no.1, 67-79, 2020. (SCI).

[12] Ching-Chih Tsai, Chien-Cheng Yu, and Chung-Wei Wu, "Adaptive distributed BLS-FONTSM formation control for uncertain networking heterogeneous omnidirectional mobile multirobots," *Journal of the Chinese Institute of Engineers*, vol.43, no.2, pp. 171-185, 2020. (SCI).

[13] C. C Chan and C. C. Tsai, "Collision-free speed alteration strategy for human safety in human-robot coexistence environments," *IEEE Access*, vol. 8, pp. 80120-80133, Apr. 2020. (SCI).

[14] C. C Chan and C. C. Tsai, "Collision-free path planning based on new navigation function for an industrial robotic manipulator in human-robot coexistence environments," *Journal of the Chinese Institute of Engineers*, vol. 43, no. 6, pp. 508-518, May 2020. (SCI).

[15] Ching-Chih Tsai, Chun-Chieh Chan, Chien-Cheng Yu, Hung-Sheng Chen, Guo-Shun Hung, "Adaptive PID-Like control using broad learning system for nonlinear dynamic systems," *Journal of Marine Science and Technology*, vol.28, no.5, pp. 357-366, 2020 (SCI).

[16] Ching-Chih Tsai, Chun-Chieh Chan, Yi-Chang Li , Feng-Chun Tai, "Intelligent adaptive PID control using fuzzy broad learning system: an application to tool-grinding servo control systems," *International Journal of Fuzzy Systems,* vol.22, no. 7, pp. 2149-2162, 2020. (doi: 10.1007/s40815-020-00913-x). (SCI).

[17] Ya-Yun Hsiao, Feng-Chun Tai, Chun-Chieh Chan, and Ching-Chih Tsai, "A Computational Method to Estimate the Effect of Gold Nanoparticles on X-Ray Induced Dose Enhancement and Double-Strand Break Yields," *IEEE Access,* vol.9, pp.62745-62751, April 26, 2021, doi: 10.1109/ACCESS.2021.3075433. (SCI).

[18]Chia-Wei Kuo, Ching-Chih Tsai*, and Chi-Tai Li, "Intelligent leader-following consensus formation control using recurrent neural networks for small-size unmanned helicopters," *IEEE Transactions on Systems, Man and Cybernetics: Systems*, vol. 51, no. 2, pp. 1288-1301, February 2021. (SCI).

[19] Ya-Yun Hsiao, Fang-Hsin Chen, Chun-Chieh Chan, and Ching-Chih Tsai*, "Monte Carlo Simulation of Double-strand Break Induction and Conversion after Ultrasoft X-Rays Irradiation, " *International Journal of Molecular Sciences*, vol. 22, 11713, 2021. https://doi.org/10.3390/ijms222111713. (SCI)

[20] Ali Rospawan, Ching-Chih Tsai, and Feng-Chun Tai, "Adaptive Predictive PID Control Using Recurrent Fuzzy Broad Learning System for Accurate Setpoint Tracking of Digital Nonlinear Time-Delay Dynamic Systems," *Int. J. IRobotics*, vol. 5, no. 3, pp. 26–32, Nov. 2022.

[21] Ching-Chih Tsai, Guan-Ming Chen, Feng-Chun Tai, Hsing-Yi Chen, and Shih-Che Chen, "Adaptive Reinforcement Learning Formation Control Using ORFBLS for Omnidirectional Mobile Multi-Robots," *International Journal of Fuzzy Systems,* vol. 24, pp. 1756–1769, 2023. https://doi.org/10.1007/s40815-023-01491-4. (SCI)

[22] Ching-Chih Tsai, Hsing-Yi Chen, Chun-Chieh Chan, Shih-Che Chen, and Guan-Ming Chen, "Intelligent Actor-Critic Learning Control for Collison-Free Trajectory Tracking of Mecanum-Wheeled Mobile Robots," accepted for publication in the *International Journal of Fuzzy Systems,* July, 2023.(SCI)

[23] Ali Rospawan, Ching-Chih Tsai1 , and Chi-Chih Hung, "Output recurrent fuzzy broad learning systems for adaptive MIMO PID control: theory, simulations and application, " *IEEE Access PP(99):1-1, January 2024.* dio:10.1109/ACCESS.2024.3359293.

B. Conference papers

[1] Xing-Cheng Lin, Ching-Chih Tsai, and Feng-Chun Tai, "Cooperative SLAM of an Indoor Quadrotor Flying Together with a Mecanum-wheeled Omnidirectional Robot," *Proc. of 2019 Asian Control Conference,* Kitakyushu International Conference Center, Kitakyushu, Fukuoka, June 9-12 , 2019.

[2] Ching-Chih Tsai and Ying-Che Lai, "Cooperative FSEIF SLAM of omnidirectional mobile multirobots," *Proc. of International Fuzzy Systems Association World Congress and North American Fuzzy Information Processing Society* (*2019 IFSA – NAFIPS*), Lafayette, Louisiana, USA, June 18-22, 2019. (Outstanding Paper Award).

[3] Hsiu-Chen Tsai, Ching-Chih Tsai, and Kao-Shing Hwang, "Self-Driving of an Indoor Quadrotor Using Improved Deep Reinforcement Learning," in *Proc.of 2019 National Symposium on System Science and Engineering (NSSSE 2019),* National Taiwan Normal University, Taipei City, 2-4 April, 2019.

[4] Po-An Wei, Ching-Chih Tsai, and Feng-Chun Tai, "Autonomous Navigation of an Indoor Mecanum-Wheeled Omnidirectional Robot Using SegNet," in *Proc. of 2019 National Symposium on System Science and Engineering (NSSSE 2019),* National Taiwan Normal University, Taipei City, 2-4 April, 2019.

[5] Bing-Yang Chen, Ching-Chih Tsai, and Feng-Chun Tai, "Intelligent Sliding-Mode Control Using Broad Learning System for Uncertain Inverse-Atlas Ball-Riding Robots," in *Proc. of 2019 National Symposium on System Science and Engineering (NSSSE 2019),* National Taiwan Normal University, Taipei City, 2-4 April, 2019.

[6] Ching-Chih Tsai, Feng-Chun Tai, Chun-An Lin, and Chun-Chieh Chan, "EtherCAT-based Impedance Control of a 6-DOF Industrial Robotic Manipulator," in *Proc. of 2019 Advanced Intelligent Mechatronics, Hong Kong Science Park, Hong Kong, China, July 8-12, 2019.*

[7] Ching-Fu Hsu and Ching-Chih Tsai, " Image Edge Sharpness with Adaptive Spatial Weighting for Mobile Displays in Mobile Robots," *in Proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019)*, Taipei, Taiwan, 20-23 Aug., 2019.

[8] Ching-Chih Tsai, Bing-Yang Chen, and Feng-Chun Tai, "Sliding-Mode Control Augmented with Broad Learning System for Self-Balancing Inverse-Atlas Ball-Riding Robots with Uncertainties," in *Proc. of 2019 IEEE International Conference on Systems, Man and Cybernetics*, Bari, Italy, October 6-9, 2019.

[9] Chun-Chieh Chan and Ching-Chih Tsai, "Collision-Free Path Planning Based on Navigation Function for an Industrial Robotic Manipulator in Human-Robot Coexistence Environments." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.1-1, Aug. 20-23, 2019.

[10] Bing-Yang Chen, Ching-Chih Tsai, and Feng-Chun Tai, "Intelligent Backstepping Sliding-Mode Formation Control Augmented with Broad Learning System for Uncertain Networked Gyro-Stabilized Ball-Riding Multirobots." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.21-21, Aug. 20-23, 2019.

[11] Chia-Wei Kuo and Ching-Chih Tsai, "Quaternion-Based Adaptive Backstepping FBLS Formation Control for Networked Multiple Tilting Quadrotors with Uncertainties." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.43-43, Aug. 20-23, 2019.

[12] Yu-Ruy Cheng and Ching-Chih Tsai, "Intelligent PID Injection Speed and Pressure Control Using Recurrent BLS for Compound Plunger in Semiconductor Die Packaging." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.70-70, Aug. 20-23, 2019.

[13] Chi-Hsiang Li and Ching-Chih Tsai, "Enzyme Compounding Ratio Control Subsystem for an Unmanned Organic Waste Processing Plant Using Fuzzy Control System." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.72-72, Aug. 20-23, 2019.

[14] Li-Chih He and Ching-Chih Tsai, "Organic Waste Classification Using Fuzzy Broad Learning System for an Automatic Organic Fertilizer Production System." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.73-73, Aug. 20-23, 2019.

[15] Hong-Yu Zheng and Ching-Chih Tsai, "Cooperative Localization Using Fuzzy DDEKF and Broad Learning System for Uncertain Heterogeneous Omnidirectional Multirobots." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.83-83, Aug. 20-23, 2019.

[16] Yen-Jung Kuo and Ching-Chih Tsai, "Cooperative Localization of an Outdoor UAV Collaborating with an UGV using a Tracked Mobile Platform." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.84-84, Aug. 20-23, 2019.

[17] Hung-Sheng Chen and Ching-Chih Tsai, "Adaptive PID-Like FBLS Temperature Control." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.85-85, Aug. 20-23, 2019.

[18] Kuo-Shuen Hong and Ching-Chih Tsai, "Intelligent Predictive Control Using Output Recurrent Broad Learning System for Servo Control System." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.86-86, Aug. 20-23, 2019.

[19] Shih-Ting Chen and Ching-Chih Tsai, "Intelligent PID-Like Motion Control Using Broad Learning System for a Gyro-Stabilized Single-Wheeled Robot." in proc. of 2019 International

Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.87-87, Aug. 20-23, 2019.
[20] Chieh-Han Yang and Ching-Chih Tsai, "Adaptive Trajectory Tracking Control Using Fuzzy Broad Learning System for an Uncertain Electric Two-Wheeled Robot." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.88-88, Aug. 20-23, 2019.
[21] Hsiu-Chen Tsai and Ching-Chih Tsai, "Goods Recognition Using Improved Tiny YOLOv3 for an Autonomous Quadrotor in an Indoor Warehouse Environment." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.91-91, Aug. 20-23, 2019.
[22] Chien-Cheng Yu, Ching-Chih Tsai, and Feng-Chun Tai, "Model Predictive Control Using Broad Leaning System for Uncertain Nonlinear Digital Systems." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.95-95, Aug. 20-23, 2019.
[23] Hsiao-Lang Wu and Ching-Chih Tsai, "Adaptive Nonsingular Terminal Sliding Mode Consensus Tracking Control Using ORFWNN for Uncertain Second-Order Nonlinear Multi-Agents Systems." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.96-96, Aug. 20-23, 2019.
[24] Yi-Chang Li, Ching-Chih Tsai, Chia-Yi Chou, and Feng-Chun Tai, "Intelligent FBLS-APPID Temperature Control for Reaction Process to Convert Organic Wastes into Organic Fertilizer." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.97-97, Aug. 20-23, 2019.
[25] Po-An Wei, Ching-Chih Tsai, and Feng-Chun Tai, "RGB-D SLAM of an Indoor Omnidirectional Mobile Robot with an Improved RRT." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.131-131, Aug. 20-23, 2019.
[26] Yi-Chang Li and Ching-Chih Tsai, "Intelligent Adaptive PID Control Using Fuzzy Recurrent Broad Learning System for Tool-Grinding Servo Control Systems." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.150-150, Aug. 20-23, 2019.
[27] Chieh-Yu Chuang and Ching-Chih Tsai, "Cleaning Control of the Mask Cleaner for TFT-LCD Exposure." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.155-155, Aug. 20-23, 2019.
[28] Ching-Fu Hsu and Ching-Chih Tsai, "Image Edge Sharpness with Adaptive Spatial Weighting for Mobile Displays in Mobile Robots." in proc. of 2019 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2019), Taipei, Taiwan, pp.158-158, Aug. 20-23, 2019.
[29] Ching-Chih Tsai,Yi-Chang Li, and Feng-Chun Tai "Intelligent Auto-Tuning of PID Controllers Using Fuzzy Broad Learning System for Tool-Grinding Servo Control Systems," in *Proc. of 2019 International Conference on Fuzzy Theory and Its Applications*, Tamkang University, Danshui, New Taipei City, Nov. 7-10, 2019.
[30] Chien-Cheng Yu and Ching-Chih Tsai, "Adaptive PID-Like Control Using Broad Learning System for Nonlinear Dynamic Systems," in *Proc. of 2019 CACS International Automatic Control Conference*, Keelung, Taiwan, Nov. 12-15, 2019.
[31] 張琇婷，蔡清池, 戴逢均 "具物聯網功能之自動化倉儲物流搬運系統研製"in Proc. of 2019 National Conference on Advanced Robotics (NCAR 2019), Taipei Nangang Exhibition Center, Taipei, Taiwan, August 20-23, 2019 (The third place, the best student paper contest).
[32] Yen-Jung Kuo and Ching-Chih Tsai, "Cooperative Global Localization Using Fuzzy Kalman Filtering and Real-Time Kinematics GPS for an Outdoor UAV with an UGV," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.
[33] Chieh-Han Yang and Ching-Chih Tsai, "System Design and Trajectory Tracking Control of a Multifunctional Gyro-Stabilized Two-Wheeled Robot," in *Proc. of 2020 National Symposium*

on System Science and Engineering (NSSSE 2020), National Chung Hsing University, Taichung, 19-20 June, 2020.

[34] Hong-Yu Zheng and Ching-Chih Tsai, "Adaptive Integral Terminal Sliding-Mode Collision-Free Formation Control Using Fuzzy Broad Learning System for Uncertain Networking Heterogeneous Omnidirectional Mobile Multirobots," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[35] Shih-Ting Chen, Ching-Chih Tsai, and Feng-Chun Tai,"Intelligent Collision-Free Trajectory Tracking Using Output-Recurrent Broad Learning System and Potential Functions for an Uncertain Gyro-Stabilized Inverse-Atlas Ball-Riding Robot," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[36] Chieh-Yu Chuang and Ching-Chih Tsai, "System Design and Cleaning Control of a Robotic Mask Cleaner for TFT-LCD Exposure," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[37] Hung-Sheng Chen and Ching-Chih Tsai, "Adaptive Nonlinear Model Predictive Control Using Fuzzy Broad Learning System," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[38] Kuo-Shuen Hong and Ching-Chih Tsai, "Adaptive PID-Like Control Using Output Recurrent Broad Learning System for Discrete-Time Nonlinear Dynamic Systems," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[39] Yu-Ruy Cheng and Ching-Chih Tsai, "Intelligent PID Injection Speed and Pressure Control for Compound Plunger in Semiconductor Die Packaging," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[40] Chia-Yi Chou, Ching-Chih Tsai, and Hung-Sheng Chen, "Intelligent Adaptive PID Temperature Control Using Output Recurrent Fuzzy Broad Learning System: An Application to Chemical Heating Process in an Wafer Cleaning Machine," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[41] Shih-Chang Huang and Ching-Chih Tsai, "Execution Time Optimization of Complex Control Equations for Four Safety Modules in Human-Robot Coexistence Environments," in *Proc. of 2020 National Symposium on System Science and Engineering (NSSSE 2020),* National Chung Hsing University, Taichung, 19-20 June, 2020.

[42] Ching-Chih Tsai, Hung-Sheng Chen, and Feng-Chun Tai, "Adaptive PID-Like control using fuzzy broad learning system for nonlinear dynamic systems," in *Proc. of 2020 International Conference System Science and Engineering (ICSSE 2020),* Sunport Hall Takamatsu, Kagawa, Japan, August 31-Sptember 3, 2020.

[43] Ching-Chih Tsai and Yu-Ruy Cheng, "Intelligent PID Injection Speed and Pressure Control Using ORBLS for Compound Plunger in Semiconductor Die Packaging," in *Proc. of 2020 International Conference System Science and Engineering (ICSSE 2020),* Sunport Hall Takamatsu, Kagawa, Japan, August 31-Sptember 3, 2020.

[44] Hong-Yu Zheng and Ching-Chih Tsai, " Cooperative Localization Using Fuzzy Broad Learning System and Fuzzy DDEKF for Uncertain Heterogeneous Omnidirectional Multirobots," in *Proc. of 2020 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2020)*, Taipei, Taiwan, Aug. 18-21, 2020.

[45] Chieh-Han Yang and Ching-Chih Tsai, " Dynamic Mode Transition and Control of a Multifunctional Gyro-Stabilized Two-Wheeled Robot," in *Proc. of 2020 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2020)*, Taipei, Taiwan, Aug. 18-21, 2020.

[46] Shih-Ting Chen and Ching-Chih Tsai, " Intelligent Collision-Free Formation Control Using Output Recurrent Broad Learning System and Potential Functions for Multiple Gyro-Stabilized Ball-Riding Robots with Uncertainties," in *Proc. of 2020 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2020)*, Taipei, Taiwan, Aug. 18-21, 2020.

[47] Yen-Jung Kuo and Ching-Chih Tsai, " Robotic Farming System Using Collaborative UAV and UGV," in *Proc. of 2020 International Conference on Advanced Robotics and Intelligent Systems (ARIS 2020)*, Taipei, Taiwan, Aug. 18-21, 2020.

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註：本表若不敷使用請自行影印

候選人親筆簽名：蔡清池

肆. 發展院務理念摘要

1. 協助院內系所提升全球領域排名。
2. 協助院內系所提升世界排名。
3. 協助院系系所合作，爭取跨領域國家級大計畫。
4. 與世界名校簽立碩博士雙學位合約。
5. 廣泛邀請世界百大名校教授訪院或到院授課
6. 與台積電合作爭取成立院內的半導體學程或專業學院。
7. 積極推展院內人工智慧科技，通訊，晶片設計與智慧產業等產業。
8. 協助院內教師積極從事教學研究服務。

候選人親筆簽名：

國立中興大學電機資訊學院院長候選人

最近五年符合本校院長遴選、續聘、及解聘辦法第 5 條第 2 項之資格條件一覽表

院長候選人是否曾因違反學術倫理而受校教評會處分。□是 ☑否

符合院長候選人資格條件勾選(須符合以下條件之一，並檢附佐證資料)

候選人姓名	符合條件（請勾選）及相關內容
蔡清元	☑於各學院認可之國際期刊發表論文〔含發明專利、新品種育成、技術移轉等成果〕三篇(件)(第一作者或通訊作者)以上。文學院、管理學院及法政學院包含國家科學及技術委員會各學門之一級期刊或國際期刊對等之論文集論文二篇以上，或由具審查制度之出版單位且經院教評會審查通過出版專書一本以上。 ☑曾主持三年以上國家科學及技術委員會研究型計畫者。文學院、管理學院及法政學院最近五年曾主持二年以上國家科學及技術委員會研究型計畫者。 □曾獲校級教學或服務特優獎勵者。 【前述之著作均須符合本校「教師升等評審標準暨聘任升等著作送審準則」之規定。】 ※相關資格條件敘明如下：

附註：

一、國立中興大學院長遴選、續聘、及解聘辦法第5條第2項規定：「前項候選人應為學養俱佳、教學認真、公正、熱心之教授，且須有下列各款條件之一：一、最近五年於各學院認可之國際期刊發表論文〔含發明專利、新品種育成、技術移轉等成果〕三篇(件)(第一作者或通訊作者)以上。文學院、管理學院及法政學院包含國家科學及技術委員會各學門之一級期刊或國際期刊對等之論文集論文二篇以上，或由具審查制度之出版單位且經院教評會審查通過出版專書一本以上。二、最近五年曾主持三年以上國家科學及技術委員會研究型計畫者。文學院、管理學院及法政學院最近五年曾主持二年以上國家科學及技術委員會研究型計畫者。三、最近五年曾獲校級教學或服務特優獎勵者。」又第3項規定：「前述之著作均須符合本校「教師升等評審標準暨聘任升等著作送審準則」之規定。」

二、請依符合之條件敘明相關內容：

1.於各學院認可之國際期刊發表論文：請敘明作者、論文名稱、出版處所、出版年月、頁次。

2.專書一本(含)以上(文學院、管理學院及法政學院)：請敘明作者、專書名稱、出版處所、出版年月。

3.曾主持國家科學及技術委員會研究型計畫者：請敘明計畫名稱、時間。

4.曾獲校級教學或服務特優獎勵者：請敘明獲獎時間。

三、本表若不敷使用請自行增加列數，並請註記頁次。

候選人親筆簽名：蔡清元

IEEE Access
Multidisciplinary | Rapid Review | Open Access Journal

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Digital Object Identifier 10.1109/ACCESS.2020.2988654

Collision-Free Speed Alteration Strategy for Human Safety in Human-Robot Coexistence Environments

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ABSTRACT This paper presents a novel real-time collision-free speed alteration strategy using a danger index and an elite real-coded genetic algorithm (ERGA) for environments in which humans and robots coexist or cooperate, in order to guarantee the safety of an operator who works with a collaborative robot. A danger index based on ellipsoid modeling of the operator and robot describes the degree of safety during human–robot interactions. The ERGA and a penalty function are used to solve the constrained nonlinear optimization problem to change the handling speed of the robot. Comparative simulation results show the superiority of the proposed method by comparing to two existing methods. The applicability of the proposed method is verified using two experiments involving a 6-DoF industrial manipulator with an EtherCAT network protocol, an RGB-D sensor and a real-time operation system.

INDEX TERMS Collaborative robot, danger index, ellipsoid modeling, elite real-coded genetic algorithm (ERGA), human-robot coexistence, human-robot cooperation, RGB-D sensor, speed alteration.

I. INTRODUCTION

Many industrial applications require humans and robots to coexist so that the safety of human operators must be guaranteed at all times. The workspaces for robotic manipulators often overlap those for human operators and numerous conventional methods use barriers to isolate robots and avoid contact and collisions. Few studies ensure safe and efficient human-robot collaborations by relaxing the separation of robot and human workspaces [1], [2].

In such collaborations, the current state of the environment must be firstly determined. Different types of sensors, such as a floor mat [2] and tactile sensors [3], were used to dynamically detect a human operator's activity in an environment. An RGB-D sensor was affordable and flexible in terms of installation and allowed a high resolution for problems that involve computer visions and robotics [4]–[6]. Since the Microsoft Kinect sensor was released, more than two thousand papers have been published for conferences or in journals of the IEEE [4]. Flacco and Luca [7] used the depth information from two Kinect sensors to monitor a task that involves collaboration between a human and a robot. Morato *et al.* [8] proposed an exteroceptive sensing framework that uses a multiple Kinect sensor to perform an assembly task that involves human-robot cooperation.

Studies by Flacco and Luca [7] and Morato *et al.* [8] showed that if a human operator is detected inside a robot's workspace, a collision is possible, so real-time collision detection is important for collision-free planning. Many collision detection algorithms [9] were used in robotics and for computer-aided design. However, collision detection may encounter a highly computational complexity for moving objects. In order to reduce computational complexity, bounding volumes are used to reduce the computational cost because geometric primitives are used. Ellipsoids have a simple mathematical representation so they are used as bounding volumes for the detection of collisions with natural objects [10]–[13]. Rimon and Boyd [10] used minimum-volume enclosing ellipsoids to calculate the distance between a robot and an obstacle. Bablan and Bone [13] used spheres to represent the distance between a robot and a human and used this distance to determine a cost function.

The level of danger to human operators in an environment that involves human-robot must be calculated and this

The associate editor coordinating the review of this manuscript and approving it for publication was Yongping Pan.

Intelligent Leader-Following Consensus Formation Control Using Recurrent Neural Networks for Small-Size Unmanned Helicopters

Chia-Wei Kuo, Ching-Chih Tsai, *Fellow, IEEE*, and Chi-Tai Lee

***Abstract*—In this paper, an intelligent leader-following consensus formation control method using recurrent neural networks (RNNs) is presented for a team of uncertain small-size unmanned helicopters (SSUHs). After a brief description of the dynamic model of each uncertain SSUH by a set of multivariable fourth-order state equations, the leader–follower multi-SSUH system with a virtual leader is modeled by the directed graph theory. An intelligent adaptive formation control approach is proposed to fly together all the follower SSUHs in formation by using RNN to online learn the system uncertainties, consensus tracking, and the Lyapunov stability theory. The four simulations on three cooperating SSUHs are conducted to exemplify the effectiveness and merits of the proposed control method.**

***Index Terms*—Consensus control, cooperative formation control, recurrent neural networks (RNNs), small-size unmanned helicopter (SSUH).**

I. Introduction

OVER the past and present decades, many researchers have widely investigated cooperative control problems via information exchange for multivehicle, multirobot, and multiagent systems (MASs). This type of cooperative control has been shown applicable in many engineering applications, including multirobots, multisatellite, multiple unmanned aerial vehicles (UAVs), distributed sensor networks, automatic guided vehicles (AGVs), and unmanned helicopters [1]–[4]. The majority of existing cooperative control methods is based on consensus control owing to networking flexibility.

Several consensus control approaches have been proposed for MASs. These methods can be classified into several categories in different aspects. The average consensus described in [5] and [6] is a fundamental method to deal with the consensus problem for simple integrators or a linear MAS. Average consensus has been considered as a stationary consensus approach because every agent converges to the average of the initial position of all agents under appropriate conditions. Rezaee and Abdollahi [7], Rezaei and Menhaj [8], and Huang *et al.* [9] further extended the average consensus method to higher-order systems without disturbances or uncertainties. In order to overcome nonlinearities, uncertainties, and disturbances for MASs, the studies in [10]–[14] proposed linear average consensuses with robust analysis to determine the parameters of the controller, and Men *et al.* [15] used a neural network (NN) compensator to approximate nonlinear terms and disturbances and Nguyen [16] linearized the system with feedback linearization method. The drawbacks of the aforementioned methods are twofold. First, the design of the parameters of the controller depends on the information of the communication protocol, which is global. Second, the asymmetric form of the directed graphs introduces technical difficulties on proving the designed protocols, such as complex eigenvalues, often overcome by assuming the information of the global topology to be known. On the other hand, Hua *et al.* [17] and Qian *et al.* [18] proposed sliding-mode control for the nonlinear MASs and Zhang *et al.* [19] introduced sliding control law for a fuzzy MAS. However, the method in [17] and [18] needs agents to exchange control commands, thereby increasing the communication load and time delay.

Adaptive backstepping control has been widely studied and proved effective in solving consensus or formation control problems for high-order, nonlinear, uncertain MASs. The study in [20] demonstrated finite-time distributed consensus control methods by backstepping for high-order linear systems without disturbances and uncertainties. Shang *et al.* [21] and Chen *et al.* [22] used NNs to adaptively approximate and compensate for uncertainties. In addition, adaptive backstepping control approaches with variance command filters were introduced in [23]–[27] to overcome the complexity explosion during the controller's derivation processes. Moreover, the studies in [28]–[32] considered the situations where only output states of the agents were available and then introduced a full-state observer to achieve the output consensus conditions. On the other hand, the methods in [33]–[36] estimated the states of the leader or the parameters of the leader by assuming that the model of the leader is known. The problems of the aforementioned methods are summarized in four aspects. First, the target function using NN approximation is not distributed but depends on communication topologies.

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Color versions of one or more of the figures in this paper are available online at https://ieeexplore.ieee.org.

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Intelligent Adaptive PID Control Using Fuzzy Broad Learning System: An Application to Tool-Grinding Servo control Systems

Ching-Chih Tsai, Chun-Chieh Chan, Yi-Chang Li & Feng-Chun Tai

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Intelligent Adaptive PID Control Using Fuzzy Broad Learning System: An Application to Tool-Grinding Servo control Systems

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Received: 8 November 2019 / Revised: 30 April 2020 / Accepted: 22 June 2020

Abstract This paper presents an intelligent adaptive proportional-integral-derivative (PID) control method using fuzzy broad learning system (FBLS) and investigates how the method can be applied to control a tool-grinding servo control (TGSC) system. Due to accuracy, quality and geometric errors which are often difficult to capture the dynamics of the controlled plants or systems, fixed-gain PID controllers without good three-term parameters cannot meet the stringent control performance specifications of nonlinear industrial systems and servomechanisms. To accomplish better control, an adaptive PID control strategy based on the FBLS, or abbreviated as FBLS-APPID, is rigorously proposed by integrating an online parameter learning FBLS identifier together with an adaptive predictive PID control law using FBLS, to eliminate tracking error and achieve fast-tracking and disturbance rejection. Numerical simulations on the two existing discrete-time nonlinear time-delay processes are performed to show the merits and superiority of the constructed FBLS-APPID by comparing to three existing adaptive PID methods. Finally, the applicability of the proposed method is well exemplified by conducting comparatively experimental results on a servo control loop of a real TGSC machine with fixed PID gains tuned by the proposed FBLS-APPID method.

Keywords Adaptive PID control · Fuzzy broad learning system (FBLS) · Identifier · Predictive control · Process control · Tool-grinding servo control (TGSC) systems

1 Introduction

Conventional fixed-gain PID controllers have been widely used in industry and machine tool industry due to their simple control structure, ease of tuning low cost and high robustness [1–3]. PID parameter optimization for such PID controllers has been regarded as an important parameter search problem in academia and industry. To deal with the problem, Wu [4] presented an RGA-based PSO optimization method for unconstrained problems and Hsu [5] proposed a PSO-RGA algorithm to tune the PID gains in the inner and outer loops of the warm water supply systems with solar heat pumps, which are modeled by simple first-order system model with time delays. However, fixed-gain PID controllers may not provide satisfactory control performance or meet stringent performance requirements for many industrial nonlinear dynamic systems.

Due to the ease of use and engineering efficiency, several self-tuning or adaptive PID control approaches have been proposed by researchers in [6–8] for industrial applications. Design procedures of adaptive PID controllers have been documented in some detail in [6–8] and references therein. Worthy of mention is that the researchers in [6–8] developed their proposed model-based

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附表五

國立中興大學特聘教授近五年內執行及申請中之研究計畫

申請截止日前 5 年執行之所有研究計畫，填寫資料應含計畫名稱、主持人擔任之工作、計畫起迄年月、受補助或委託機構、執行情形、受補助或委託經費（政府機構/民間企業）及經費總計等項。

推薦單位：電機系　　姓名：蔡清池

計畫名稱	計畫內擔任工作	起訖年月	補助或委託機構	執行情形	經費總額
前瞻半導體封裝製程設備之智慧節能程序與伺服控制技術研發	計畫主持人	2022.08.01 至 2023.07.31	國科會	執行中	1,119,000
智慧機器人技術研發與服務產學聯盟(2/3)	計畫主持人	2023.2.01 至 2024.01.31	國科會	執行中	1,800,000
IFSA 學會理事長會務推動執行(1/3)	計畫主持人	2022.3.01 至 2023.02.28	國科會	執行中	200,600
IFSA 學會理事長會務推動執行(1/3)	計畫主持人	2021.3.01 至 2022.02.28	科技部	已完成	262,600
智慧機器人技術研發與服務產學聯盟(1/3)	計畫主持人	2022.2.01 至 2023.01.31	國科會	已完成	1,850,000
機器駕駛關鍵技術及模組開發研究中心	共同主持人	2021.5.31 至 2022.04.30	科技部	已完成	19,300,000
培育智慧製造/工業 4.0 軟體核心技術具國際學術競爭力與產業高度貢獻性之研究團隊計畫	主持人	2019.08.01 至 2022.01.31	科技部	已完成	9,500,000
使用深寬度學習之智慧多移動機器人導航運動控制系統研製	計畫主持人	2020.08.01 至 2022.07.31	科技部	已完成	4,722,000
智慧型工業機器人之人機協作安全防護模組研製(4)	計畫主持人	2020.08.01 至 2021.07.31	科技部	已完成	2,437,000

網宇實體多移動機器人系統之關鍵技術研發與其應用-總計畫兼子計畫一：網宇實體多異質移動機器人系統之智慧分散式估測控制與合作協作研究及實現(II)	計畫主持人	2017.08.01 至 2020.07.31	科技部	已完成	3,664,000
智慧型工業機器人之人機協作安全防護模組研製(3)	計畫主持人	2019.08.01 至 2020.07.31	科技部	已完成	1, 524, 000
智慧型工業機器人之人機協作安全防護模組研製(2)	計畫主持人	2018.08.01 至 2019.07.31	科技部	已完成	2,110,00
牛番茄生產熱逆境管理及病蟲害預警系統開發(1/3)	協同研究人員	2018.08.06 至 2019.06.31	科技部	已完成	10,000,000
教育部智慧製造跨校域學策略聯盟計畫	協(共)同主持人	2019.02.01 至 2020.01.31	教育部	已完成	7,100,000
開發「無人有機廢棄物的人工智慧快速處理廠」之設計及建構(2/4)	共同主持人	2019.01.01 至 2019.12.31	科技部	已完成	12,456,600
開發「無人有機廢棄物的人工智慧快速處理廠」之設計及建構(1/4)	共同主持人	2018.01.01 至 2019.12.31	科技部	已完成	16,215,000
教育部智慧製造跨校域學策略聯盟計畫	協(共)同主持人	2018.02.01 至 2019.01.31	教育部	已完成	7,100,000
智慧型工業機器人之人機協作安全防護模組研製(1)	計畫主持人	2017.08.01 至 2018.07.31	科技部	已完成	913, 000
「網宇實體多移動機器人系統之關鍵技術研發與其應用-總計畫兼子計畫一：網宇實體多異質移動機器人系統之智慧分散式估測控制與合作協作研究及實現(I)」	計畫主持人	2017.08.01 至 2018.07.31	科技部	已完成	1,975,000

112年度 【 智慧機器人技術研發與服務產學聯盟(2/3) 】經費核定清單

執行機構：國立中興大學
國立臺灣大學
國立中山大學
國立中正大學
國立宜蘭大學

主　持　人：蔡清池　教授[電機工程學系（所）]
共同主持人：郭重顯　教授[機械工程學系暨研究所]
黃國勝　教授[電機工程學系（所）]
林惠勇　教授[電機工程學系]
黃旭志　教授[電機工程學系（所）]

補助項目	申請金額	核定金額	說　　明
業務費	2,646,384	1,615,300	一、研究人力、耗材、物品、圖書及雜項等費用 1.本計畫追加博士生兼任人員費用1名，50,000元(羅保恩(112年9月至113年1月，月支10,000元))(專款專用，不得流用，如有餘款應全數繳回)(1130005093)。 ※計畫主持人得依執行機構自訂標準考量實際約用研究人力之工作內容、專業技能、預期績效表現等因素，於補助經費內調整核給相關費用。 註：本計畫彈性支用額度為25,000元
研究設備費	95,000	0	
國外差旅費	100,000	0	
管理費	411,208	234,700	
合　　計	3,252,592	1,850,000	執行期限：112/02/01 ～ 113/01/31 計畫編號：NSTC 112-2622-8-005-005 -TE1

研究類型：產學技術聯盟合作計畫(個別型)　　多年期計畫　　流水號：112PFA0510007
學門名稱：產學技術聯盟合作計畫　　承辦人：林技寬
聯絡電話：02-2737-7231(方先生/小姐)

應繳報告：期中報告(請於計畫執行期滿前三個月，至本會網站線上繳交進度報告，以憑核定下年度經費)
研究成果歸屬：國立中興大學
各項費用之支用請依「國家科學及技術委員會補助專題研究計畫經費處理原則」規定辦理。
年度所需經費如未獲立法院審議通過或經部分刪減，國家科學及技術委員會得依審議結果調減補助經費，並按預算法第五十四條規定辦理。
如未依規定繳交報告或執行成效未如預期且計畫主持人未盡力改善時，國家科學及技術委員會得調減次年度經費或終止執行該計畫。

蔡清池

112年度 【 前瞻半導體封裝製程設備之智慧適應節能程序與伺服控制技術研發(II) 】經費核定清單

執行機構：國立中興大學　　主 持 人：蔡清池　　教授[電機工程學系（所）]

補助項目	申請金額	核定金額	說　　明
業務費	1,176,000	725,600	一、研究人力、耗材、物品、圖書及雜項等費用 1.本會依規定主動增核研究主持費1名，月支15,000元(12.00月計) 2.本計畫追加博士生兼任人員費用1名，60,000元(羅保恩113年2月至7月，月支10,000元)(專款專用，不得流用，如有餘款應全數繳回)(1130011462)。 ※計畫主持人得依執行機構自訂標準考量實際約用研究人力之工作內容、專業技能、預期績效表現等因素，於補助經費內調整核給相關費用，但不得低於本會規定最低標準。 註：本計畫彈性支用額度為20,000元
研究設備費	335,000	150,000	嵌入式控制器，IoT控制器，筆記型電腦，線性伺服控制模組，壓力模組，氣動持取模組
國外差旅費	90,000	90,000	一、出席國際學術會議：90,000元 二、本項目不核列管理費
管理費	226,650	94,400	研究主持費不核列管理費
合　　計	1,827,650	1,060,000	執行期限： 112/08/01 ～ 113/07/31 計畫編號： NSTC 112-2221-E-005-077 -

研究類型：一般研究計畫(個別型)
學門名稱：人工智慧控制與應用
應繳報告：成果報告
研究成果歸屬：國立中興大學

流水號：112WFA0510404
承辦人：杜青駿
聯絡電話：02-2737-7527

各項費用之支用請依「國家科學及技術委員會補助專題研究計畫經費處理原則」規定辦理。
年度所需經費如未獲立法院審議通過或經部分刪減，國家科學及技術委員會得依審議結果調減補助經費，並按預算法第五十四條規定辦理。
如未依規定繳交報告或執行成效未如預期且計畫主持人未盡力改善時，國家科學及技術委員會得調減次年度經費或終止執行該計畫。

蔡清池

112年度國家科學及技術委員會 經費核定清單

計畫類別: 補助學者提昇國際影響力
執行機構: 國立中興大學

補助名稱: IFSA學會理事長會務推動執行(3/3)
補助擔任職位:
主持人: 蔡清池 教授且兼任IFSA學會當選理事長 國立中興大學電機工程學系（所）

補助項目	申請金額	核定金額	說明
業務費	$NTD 80,000	$NTD 58,000	(一)專、兼任助理酬金及臨時工資:NT$41,500 (二)耗材及雜項費用:NT$16,500 (三)上述2項費用間得依主持人需求經由執行機構內部行政程序進行變更流用，惟各項經費支用仍不得超過本會所訂上限。
國外差旅費	$NTD 130,450	$NTD 130,000	國外差旅費:NT$130,000。 (一)國外差旅費:NTD$130,000。 1.計畫主持人往返臺灣-美國、臺灣-南韓共2人次，合計14天之國外差旅費及會議註冊費。 2.新增計畫主持人往返臺灣-美國(匹茲堡)共1人次，合計9天之國外差旅費及會議註冊費。 (二)本項目不核列管理費；因故未動支，不得流用至業務費，款項應全數繳回。
管理費	$NTD 6,400	$NTD 4,600	--
合　　計	$NTD 216,850	$NTD 192,600	執行期限:112/03/01~112/12/31 計畫編號:112-2926-I-005-501

學門名稱: E61-控制工程
收文號: 1120023414

流水號: 111PGRFA0500001
承辦人: 孫小于

應繳報告：
期末報告(請於計畫執行期滿後3個月內，至本會網站線上繳交期末成果報告)

備註：
1.計畫之變更與終止、報告繳交及其他事項，請依本計畫要點及合約書附件等相關規定辦理。

2.應依本計畫要點第12點及其相關規定辦理經費支用及結報，經費如有結餘者，應如數繳回；且執行機構依內部行政程序辦理或報經本會同意之

相關文件均應附於經費結報案內。

3.國外差旅費因故未動支者，不得流用至業務費，應將款項全部繳回本會。「業務費」及「國外差旅費」兩補助項目間若有需要且流進、流出比例在50%以內，得經執行機構行政程序予以變更及流用。惟仍以流用至核給之業務分項為限，不得自行增列項目。

4.案內計畫「國外差旅費」之生活費應依院頒補助「中央政府各機關派赴國外各地區出差人員生活費日支數額表」之日支標準規定計算。

5.各年度所需經費如未獲立法院審議通過或經部分刪減，本會得依審議情形調整補助經費，並按預算法第54條規定辦理。
變更歷程：
2023/04/24：
計畫主持人申請新增出國行程於112年5月14日至5月22日(計9天)赴美國匹茲堡參加IFSA學會理事長會務推動，及NAFIPS' 2023 conference (2023北美模糊資訊處理學會年會) 會前會議等事宜。經國科會審查同意。

111年度科技部 經費核定清單

計畫類別: 補助學者提昇國際影響力
執行機構: 國立中興大學

補助名稱: IFSA學會理事長會務推動執行(2/3)
補助擔任職位: 理事
主持人: 蔡清池 教授且兼任IFSA學會當選理事長 國立中興大學電機工程學系（所）

補助項目	申請金額	核定金額	說明
業務費	$NTD 80,000	$NTD 70,000	(一)專、兼任助理酬金及臨時工資:NT$50,000 (二)耗材及雜項費用:NT$20,000 (三)上述2項費用間得依主持人需求經由執行機構內部行政程序進行變更流用，惟各項經費支用仍不得超過本部所訂上限。
國外差旅費	$NTD 125,740	$NTD 125,000	(一)國外差旅費:NT$125,000。計畫主持人往返臺灣-捷克及臺灣-義大利各1人次、合計10天之國外差旅費及會議註冊費。 (二)本項目不核列管理費；因故未動支，不得流用至業務費，款項應全數繳回。
管理費	$NTD 6,400	$NTD 5,600	無。
合　　計	$NTD 212,140	$NTD 200,600	執行期限:111/03/01~112/02/28 計畫編號:111-2926-I-005-501

學門名稱: E61-控制工程
收文號:
流水號: 110PGRFA0500001
承辦人: 孫小于

應繳報告：
期中報告(請於當年期計畫執行期滿前2個月至計畫執行期滿之日，至本部網站線上繳交期中進度報告)

備註：
1. 計畫之變更與終止、報告繳交及其他事項，請依本計畫要點及合約書附件等相關規定辦理。
2. 執行機構應於計畫案執行完畢後至遲3個月內，依本要點第12點之規定檢據備函向本部辦理經費結報，逾期未完成者需自行負擔費用，如有結餘應如數繳回。且執行機構依內部行政程序辦理或報經本部同意之相關文件均應附於經費結報案內。
3. 上述「業務費」及「國外差旅費」兩補助項目間若有需要且流進、流出比例在20 % 以內，得經執行機構行政程序予以變更及流用。惟仍以流用至核給之業務分項為限，不得自行增列項目。
4. 案內計畫「臨時工資」以新臺幣5萬元為上限；「耗材及雜項費用」以新臺幣3萬元為上限；「國外差旅費」之生活費應依院頒補助「中央政府各機關派赴國外各地區出差人員生活費日支數額表」之日支標準規定計算。

5. 各年度所需經費如未獲立法院審議通過或經部分刪減，科技部得依審議情形調整補助經費，並按預算法第54條規定辦理。

110年度科技部 經費核定清單

計畫類別: 補助學者提昇國際影響力
執行機構: 國立中興大學

補助名稱: IFSA學會理事長會務推動執行(1/3)
補助擔任職位: 理事
主持人: 蔡清池 教授且兼任IFSA學會當選理事長 國立中興大學電機工程學系（所）

補助項目	申請金額	核定金額	說明
業務費	$NTD 80,000	$NTD 70,000	(一)專、兼任助理酬金及臨時工資:NT$50,000 (二)耗材及雜項費用:NT$20,000
國外差旅費	$NTD 187,340	$NTD 187,000	(一)國外差旅費:NT$187,000。計畫主持人往返臺灣-美國、臺灣-斯洛伐克各1人次、合計9天之國外差旅費及會議註冊費。受新冠肺炎疫情影響，經科技部審查同意取消往返臺灣-美國行程，改以視訊形式參加韓國ISIS2021研討會，得於原核定金額內由原「國外差旅費」項下支應該線上會議註冊費。 (二)本項目不核列管理費；因故未動支，不得流用至業務費，款項應全數繳回。
固定百分比管理費	$NTD 6,400	$NTD 5,600	
合　　計	$NTD 273,740	$NTD 262,600	執行期限:110/03/01~111/02/28 計畫編號:110-2926-I-005-501

學門名稱: E61-控制工程
收文號: 1100071341

流水號: 109WGRFA0500001
承辦人: 孫小于

應繳報告：
期中報告(請於當年期計畫執行期滿前2個月至計畫執行期滿之日，至本部網站線上繳交期中進度報告)

備註：
1. 計畫之變更與終止、報告繳交及其他事項，請依本計畫要點及合約書附件等相關規定辦理。

2. 應依本計畫要點第12點及其相關規定辦理經費支用及結報，經費如有結餘者，應如數繳回；且執行機構依內部行政程序辦理或報經本部同意之相關文件均應附於支出原始憑證內，以憑核銷。

3. 上述「業務費」及「國外差旅費」兩補助項目間若有需要且流進、流出比例在20 % 以內，得經執行機構行政程序予以變更及流用。惟仍以流用至核給之業務分項為限，不得自行增列項目。

4.案內計畫「臨時工資」以新臺幣5萬元為上限；「耗材及雜項費用」以新臺幣3萬元為上限；「國外差旅費」之生活費應依院頒補助「中央政府各機關派赴國外各地區出差人員生活費日支數額表」之日支標準規定計算。

5.各年度所需經費如未獲立法院審議通過或經部分刪減，科技部得依審議情形調整補助經費，並按預算法第54條規定辦理。

6.本案計畫主持人因受新型冠狀病毒疫情影響，申請取消往返臺灣-美國行程，改以視訊形式參加韓國ISIS2021研討會，並於原核定金額內由「國外差旅費」項下支應該線上會議註冊費，經科技部審查同意。

變更歷程：

2021/12/02：

本案計畫主持人因受新型冠狀病毒疫情影響，申請取消往返臺灣-美國行程，改以視訊形式參加韓國ISIS2021研討會，並於原核定金額內由「國外差旅費」項下支應該線上會議註冊費，經科技部審查同意。

108年度 【 培育智慧製造/工業4.0軟體核心技術具國際學術競爭力與產業高度貢獻性之研究團隊 】2年期經費核定總表

執行機構：國立中興大學

主　持　人：周至宏　　教授[機械工程學系（所）]
共同主持人：王國禎　　教授[機械工程學系（所）]
蔡清池　　教授[電機工程學系（所）]

年　　度	業　務　費	研究設備費	國外差旅費	吳大猷獎	管　理　費	合　　計	繳交報告時間 報　告　種　類
108	2,374,800	180,000	1,900,000	--------	345,200	4,800,000	109年5月底前 期中進度報告
109	2,369,800	90,000	1,900,000	--------	340,200	4,700,000	110年10月底前 期末報告
合　計	4,744,600	270,000	3,800,000	--------	685,400	9,500,000	
全程執行期限：　108/08/01　～　110/07/31			計畫編號：MOST 108-2638-E-005 -001 -MY2				

研究類型：沙克爾頓計畫(輔導規劃型)(個別型)　　學門名稱：資訊科技應用及系統整合　　流水號：108WFAB810627
研究性質：技術發展　　承辦人：杜青駿
研究成果歸屬：國立中興大學
各項費用之支用請依「科技部補助專題研究計畫經費處理原則」規定辦理。
各年度所需經費如未獲立法院審議通過或經部分刪減，科技部得依審議情形調減補助經費。
如未依規定繳交報告或執行成效未如預期且計畫主持人未盡力改善時，科技部得調減次年度經費或終止執行該計畫。

蔡清池

【 培育智慧製造/工業4.0軟體核心技術具國際學術競爭力與產業高度貢獻性之研究團隊(1/2) 】第1年經費清單

執行機構：國立中興大學

主　持　人：周至宏　教授[機械工程學系（所）]
共同主持人：王國禎　教授[機械工程學系（所）]
蔡清池　教授[電機工程學系（所）]

補助項目	申請金額	核定金額	說　　明
業務費	2,343,264	2,374,800	一、研究人力、耗材、物品、圖書及雜項等費用 1.本部主動增核主持人規劃費(108/8~109/7)1名，月支15,000元(12.000月計) ※計畫主持人得依執行機構自訂標準考量實際約用研究人力之工作內容、專業技能、預期績效表現等因素，於補助經費內調整核給相關費用。 二、本計畫彈性支用額度為25,000元
研究設備費	180,000	180,000	電腦及周邊設備，筆記型電腦，印表機，掃描器
國外差旅費	1,900,000	1,900,000	一、移地研究：900,000元 二、出席國際學術會議：1,000,000元 三、本項目不核列管理費
管理費	378,490	345,200	主持人規劃費不核列管理費
合　　計	4,801,754	4,800,000	
執行期限：108/08/01　～　110/07/31			計畫編號：MOST 108-2638-E-005 -001 -MY2

研究類型：沙克爾頓計畫(輔導規劃型)(個別型)

【 培育智慧製造/工業4.0軟體核心技術具國際學術競爭力與產業高度貢獻性之研究團隊(2/2) 】第2年經費清單

執行機構：國立中興大學

主 持 人：周至宏 教授[機械工程學系（所）]
共同主持人：王國禎 教授[機械工程學系（所）]
蔡清池 教授[電機工程學系（所）]

補助項目	申請金額	核定金額	說明
業務費	2,356,764	2,369,800	一、研究人力、耗材、物品、圖書及雜項等費用 1.本部主動增核主持人規劃費(109/8~110/7)1名，月支15,000元(12.000月計) ※計畫主持人得依執行機構自訂標準考量實際約用研究人力之工作內容、專業技能、預期績效表現等因素，於補助經費內調整核給相關費用。 二、本計畫彈性支用額度為25,000元
研究設備費	90,000	90,000	電腦及周邊設備，筆記型電腦
國外差旅費	1,900,000	1,900,000	一、移地研究：900,000元 二、出席國際學術會議：1,000,000元 三、本項目不核列管理費
管理費	367,015	340,200	主持人規劃費不核列管理費
合 計	4,713,779	4,700,000	
執行期限：109/08/01 ～ 110/07/31			計畫編號：MOST 108-2638-E-005 -001 -MY2

研究類型：沙克爾頓計畫(輔導規劃型)(個別型)

個人資料提供同意書					
文件編號	NCHU-PIMS-D-013	機密等	內部使用	版次	1.1

個人資料提供同意書

本同意書說明國立中興大學（以下簡稱本校）將如何處理本表單所蒐集到的個人資料。當您勾選「我同意」並簽署本同意書時，表示您已閱讀、瞭解並同意接受本同意書之所有內容及其後修改變更規定。若您未滿二十歲，應於您的法定代理人閱讀、瞭解並同意本同意書之所有內容及其後修改變更規定後，方得使用本服務，但若您已接受本服務，視為您已取得法定代理人之同意，並遵守以下所有規範。

一、 基本資料之蒐集、更新及保管

1. 本校蒐集您的個人資料在中華民國「個人資料保護法」與相關法令之規範下，依據國立中興大學(以下簡稱本校)【隱私權政策聲明】，蒐集、處理及利用您的個人資料。
2. 請於申請時提供您本人正確、最新及完整的個人資料。
3. 本校因執行電機資訊學院院長遴選業務所蒐集您的個人資料包括姓名、性別、身分證或護照號碼、出生年月日、國 籍、職稱、聯絡方式(通訊處、電話、傳真、E-Mail)、學經歷等。
4. 若您的個人資料有任何異動，請主動向本校申請更正，使其保持正確、最新及完整。
5. 若您提供錯誤、不實、過時或不完整或具誤導性的資料，您將損失相關權益。
6. 您可依中華民國「個人資料保護法」，就您的個人資料行使以下權利：

(1) 請求查詢或閱覽。 (2) 製給複製本。(3) 請求補充或更正。 (4) 請求停止蒐集、處理及利用。

(5) 請求刪除。

但因本校執行職務或業務所必須者，本校得拒絕之。若您欲執行上述權利時，請參考本校【隱私權政策聲明】之個人資料保護聯絡窗口聯繫。但因您行使上述權利，而導致權益受損時，本校將不負相關賠償責任。

二、蒐集個人資料之目的

1. 本校為執行電機資訊學院院長遴選業務需蒐集您的個人資料。
2. 當您的個人資料使用方式與當初本校蒐集的目的不同時，我們會在使用前先徵求您的書面同意，您可以拒絕向本校提供個人資料，但您可能因此喪失您的權益。
3. 本校利用您的個人資料期間為入學日起至畢業。

三、基本資料之保密

您的個人資料受到本校【隱私權政策聲明】之保護及規範。本校如違反「個人資料保護法」規定或因天災、事變或其他不可抗力所致者，致您的個人資料被竊取、洩漏、竄改、遭其他侵害者，本校將於查明後以電話、信函、電子郵件或網站公告等方法，擇適當方式通知您。

四、同意書之效力

1. 當您勾選「我同意」並簽署本同意書時，即表示您已閱讀、瞭解並同意本同意書之所有內容，您如違反下列條款時，本校得隨時終止對您所提供之所有權益或服務。
2. 本校保留隨時修改本同意書規範之權利，本校將於修改規範時，公告修改之事實，不另作個別通知。如果您不同意修改的內容，請勿繼續接受本服務。否則將視為您已同意並接受本同意書該等增訂或修改內容之拘束。
3. 您自本同意書取得的任何建議或資訊，無論是書面或口頭形式，除非本同意書條款有明確規定，均不構成本同意條款以外之任何保證。

五、準據法與管轄法院

本同意書之解釋與適用，以及本同意書有關之爭議，均應依照中華民國法律予以處理，並以臺灣臺中地方法院為管轄法院。

☑我已閱讀並接受上述同意書內容

當事人簽名(請親簽)： 蔡澤沛

法定代理人簽名(請親簽)：

113 年 4 月 17 日

教授證書

姓名：蔡清池

身分證字號：[redacted]

出生年月日：伍拾年肆月[redacted]

年資起算：捌拾捌年捌月

送審學校：國立中興大學（台中）

經本部依專科以上學校教師資格審定辦法審定合於教授資格此證

教育部部長 楊朝祥

中華民國[illegible]拾[illegible]年[illegible]月[illegible]貳拾貳日

教字第〇一〇二九二號

蔡清池

Northwestern University

ON RECOMMENDATION OF THE FACULTY OF THE

GRADUATE SCHOOL

NORTHWESTERN UNIVERSITY HAS CONFERRED THE DEGREE OF

DOCTOR OF PHILOSOPHY

UPON

CHING CHIH TSAI

WHO HAS HONORABLY FULFILLED ALL THE REQUIREMENTS PRESCRIBED BY THE UNIVERSITY FOR THAT DEGREE

DONE AT EVANSTON ILLINOIS THIS THIRTIETH DAY OF DECEMBER IN THE YEAR ONE THOUSAND NINE HUNDRED AND NINETY-ONE A.D.

Howard J. Trienens
CHAIRMAN OF THE BOARD OF TRUSTEES

Dale Ford Jr.
SECRETARY OF THE BOARD OF TRUSTEES

NORTHWESTERN UNIVERSITY · QUAECUMQUE · SUNT · VERA · 1851

Arnold R. Weber
PRESIDENT OF THE UNIVERSITY

DEAN

清池蔡

IEEE

IEEE Certifies that

Prof. Ching-Chih Tsai

has been elevated to the grade of

Fellow

for contributions in intelligent adaptive learning control for industrial systems and machinery

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. FOUNDED NEW YORK 1884

1 January 2017

Karen Bartleson
President

Secretary

蔡清池

MOST 科技部
Ministry of Science and Technology

107 年度科技部傑出研究獎
Outstanding Research Award

蔡清池 博士
Dr. Ching-Chih Tsai

致 力 於 控 制 工 程 方 面
之 研 究 工 作 績 效 卓 著
in recognition of his outstanding achievements
in Control Engineering research.

部長 陳良基

中華民國 108 年 5 月 May 2019

國立中興大學聘書

（109）校人聘行字第 206 號

敬　聘

蔡清池教授兼任本校研究發展處研究發展長，聘期自 110 年 2 月 1 日起至 110 年 7 月 31 日止。

此　聘

校　　長 薛富盛

中華民國　110　年　1　月　　日

國立中興大學聘書

（109）校人聘行字第 024 號

敬　聘

蔡清池教授兼任本校研究發展處副研究發展長，聘期自一百零九年八月一日起至一百十年七月三十一日止。

此　聘

校　　長 薛富盛

蔡清池

中華民國　一百零九　年　八　月　　日

國立中興大學
NATIONAL CHUNG HSING UNIVERSITY
1919

聘　　書

特聘字第 554 號

茲 敦 聘

蔡 清 池 教 授 為 本 校

特　聘　教　授

聘期自 110 年 8 月 1 日至 112 年 7 月 31 日

謹 此 至 表 尊 崇

國立中興大學校長 薛富盛

蔡清池

中　華　民　國　110　年　9　月　　日

國立中興大學
NATIONAL CHUNG HSING UNIVERSITY
1919

聘　　書

特聘字第 660 號

茲 敦 聘

蔡 清 池 教 授 為 本 校

特　聘　教　授

聘期自 112 年 8 月 1 日至 114 年 7 月 31 日

謹 此 至 表 尊 崇

國立中興大學校長 薛富盛

蔡清池

中　華　民　國　112　年　6　月

IFSA - International Fuzzy Systems Association

附件二

Tomoharu Nakashima, Secretary of IFSA
Graduate School of Humanities and
Sustainable System Sciences
Osaka Prefecture University
Gakuen-cho 1-1, Naka-ku, Sakai, Osaka 599-8531, Japan
Tel. +81-72-254-9351
Email: tomoharu.nakashima@kis.osakafu-u.ac.jp

November 22, 2022

Prof. Ching-Chih Tsai
Life Distinguished Professor
National Chung Hsing University (NCHU), Taichung, Taiwan

Dear Prof. Ching-Chih Tsai,

This is to certify that you were officially elected as the president in 2021-2023 of The International Fuzzy Systems Association (IFSA) at the council meeting on September 21, 2021. The meeting was held in a hybrid manner (in Bratislava, Czech Republic and online).

Your name is included in the list of IFSA Council Members at the following web page:

https://fuzzysystems.org/council.html

Sincerely yours,

Nakashima

Tomoharu Nakashima
Secretary of IFSA

2021-2023 IFSA Council Members List 附件三

Honorary President

Lotfi A. Zadeh (our great fuzzy founder passed away on Sep. 6, 2017)
Computer Science Division, University of California, Berkeley, CA, 94720-1776, USA

Elected Officers

Ching-Chih Tsai, President
Department of Electrical Engineering, National Chung Hsing University,
145 Xingda Rd., South Dist., Taichung 402, Taiwan
Tel: +886-4-22851549
E-mail: cctsai@nchu.edu.tw

Marek Reformat, Past President
Department of Electrical and Computer Engineering, University of Alberta
11-203 Donadeo Innovation Centre for Engineering, 9211-116 Street NW, Edmonton, Alberta, Canada T6G 1H9
Tel: +1-780-492-2848
E-mail: reformat@ualberta.ca

Humberto Bustince, President Elect
Dept. of Statistics, Computer Science and Mathematics Public University of Navarra Campus Arrosadia s/n 31006 Pamplona-Spain
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E-mail: luis.magdalena@gmail.com

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Vladik Kreinovich, Vice-President (Publicity)
Department of Computer Science, University of Texas at El Paso
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Vilém Novák, Vice-President (Awards)
Institute for Research and Applications of Fuzzy Modeling, University of Ostrava
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Susana Montes, Vice-President (Conferences)
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E-mail: montes@uniovi.es

Masahiro Inuiguchi, Vice-President (Membership)
Department of Systems Innovation, Graduate School of Engineering Science, Osaka University
1-3 Machikaneyama-cho, Toyonaka, Osaka 560-8511, Japan
Tel: +81-6-6850-6350
E-mail: inuiguti@sys.es.osaka-u.ac.jp

Category B

SOFT (Japan Society for Fuzzy Theory and Intelligent Informatics)
Yoichiro Maeda
Department of Information Science and Engineering, College of Information Science and Engineering, Ritsumeikan University,1 Nishinokyo-Suzaku-cho, Nakagyo-ku, Kyoto 604-8520 Japan
Tel: +81-77-561-4937
E-mail: yymaeda@fc.ritsumei.ac.jp

KIIS (Korean Institute of Intelligent Systems)
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School of Electrical Engineering, Hanyang University
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E-mail: frhee@fuzzy.hanyang.ac.kr

TFSA (Taiwan Fuzzy Systems Association)
Jin-Tsong Jeng
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National Formosa University.
No. 64, Wunhua Rd, Huwei Township, Yunlin County, 631, Taiwan
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E-mail: makaluo@scu.edu.cn

清池蔡

Category C

EUSFLAT (European Society for Fuzzy Logic and Technology)
Susana Montes
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E-mail:montes@uniovi.es

NAFIPS (North American Fuzzy Information Processing Society) Martine Ceberio
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Tel: +1-915-747-5480
E-mail: mceberio@utep.edu

BCFS (Brazilian Coalition on Fuzzy Systems)
Benjamin Bedregal
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E-mail: bedregal@dimap.ufrn.br

SIGEF (International Association for Fuzzy Set Management and Economy)
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E-mail: antonio.terceno@urv.cat

HFA (Hungarian Fuzzy Association)
Laszlo T. Koczy
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NSAIS (North European Society of Adaptive and Intelligent Systems)
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SC-INA (Indonesian Soft Computing Society)
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FSAT (Fuzzy Systems Association of Turkey)
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E-mail: bturksen@etu.edu.tr

ICSC (Iranian Coalition on Soft Computing (ISSSI and IFSS), Iran)
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E-mail: akbazar@um.ac.ir

RAFSSoftCom (Russian Association for Fuzzy Systems and Soft Computing)
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Centro de Computacion y Investigacion, Instituto Politecnico Nacional
Av. Juan de Dios Bátiz Esq. Miguel Othón de Mendizábal S/N,
Nueva Industrial Vallejo, 07738 Gustavo A. Madero, CDMX Mexico, D.F.
E-mail: batyr1@gmail.com

VFSS (Fuzzy Systems Society, Vietnam)
Nguyen Hoang Phuong
Informatics Division, Thang Long University
Nghiem Xuan Yem Road, Hoang Mai Distric, Hanoi, Vietnam
Tel: + 84-24-38-58-73-46
E-mail: nhphuong2008@gmail.com

寄件者: "smcs-bog@listserv.ieee.org"代表"Garai Valéria"
收件者: smcs-bog@LISTSERV.IEEE.ORG
主旨: [SMCS Vote] - Endorsement of the new AVPs, Treasurer, Secretary and Associate Secretary for 2023
日期: 2023年2月28日 下午 09:19:46

This message is being sent on behalf of Prof. Sam Kwong, SMC Society President

Dear voting BoG Members,

According to the Constitution Article V Section 4

"The President may appoint an Associate VP upon recommendation by the respective VP and endorsement by the BoG. The President may appoint an Associate Secretary, in consultation with the Secretary. All such appointments shall terminate no later than at the end of the term of the respective VP or Secretary. These appointments are renewable by the President in consultation with the respective VP/ Secretary. The Associate VPs and Associate Secretary shall be non-voting members of the BoG."

The Vice Presidents and the Secretary sent me their nomination of their respective new 2023 Associate Vice Presidents, Treasurer and the Associate Secretary.
I accepted their nominations and now I would like to ask your endorsement of the appointment of:

Ching-Chih Tsai as Associate Vice President, Conferences and Meetings for 2023
Chun Sing Lai as Associate Vice President, Systems Science and Engineering for 2023
Jiacun (Jay) Wang as Associate Vice President, Finance for 2023
Long Cheng as Associate Vice President for Publication for 2023
Syoji Kobashi as Associate Vice President for Organization and Planning for 2023
Yan Wan as Treasurer for 2023
Kevin Wong as Secretary for 2023
Chu Kiong Loo as Associate Secretary for 2023

- About Professor Syoji Kobashi:
  He was the secretary for VPOP last year: https://www.ieeesmc.org/about-smcs/governance/society-committees/#organization
  He is also TC Co-Chair of Medical Informatics: https://www.ieeesmc.org/technical-activities/cybernetics/medical-informatics/

- About Chu Kiong Loo: https://umexpert.um.edu.my/ckloo-um

Due date: Saturday, March 4, 2023 - 12:00 AM in GMT+2 (Central-European Time Zone)

A SurveyMonkey poll had been sent out, if you did not receive it, not even in your SPAM folder, please reach out to Valeria Garai, Executive Assistant of SMC Society (email: garai@uni-obuda.hu).

Thank you for your contribution!

Best regards,

Sam Kwong
IEEE Fellow, President of IEEE Systems, Man, and Cybernetics Society

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寄件者: ASETMEET2024
收件者: "Ching-Chih Tsai"
主旨: Re: Plenary Invitation to Join ASETMEET-2024
日期: 2023年7月4日 下午 08:23:04
重要性: 高

Dear Dr. Ching-Chih Tsai,

Good day!!
I hope this email finds you safe and well.

On behalf of our Committee Members, I would like to take pleasure in inviting you as a Plenary Speaker at our 3rd International Meet on Applied Science, Engineering and Technology (ASETMEET2024). This conference will take place at Dubai, UAE during September 16-18, 2024.

To learn more about the event and speaking opportunities, kindly visit our official website.
PS: https://www.albedomeetings.com/2024/asetmeet

As a plenary speaker, if you are interested in speaking at our ASETMEET2024 conference. You can confirm your participation by sending us the tentative title of your presentation towards the conference.

If you have any questions or concerns, please do not hesitate to contact us.
We are always happy to assist you.

Thank you for your consideration and we hope to hear from you soon.

Best regards,
Marie Nancy
Program Manager
ASETMEET2024
Albedo Meetings
E: asetmeet2024(@)albedomeetings(.)com

Note: If you don't want to receive any email from ASETMEET2024 please click to unsubscribe

Program Committee

IEEE SMC 2024
Kuching • Malaysia

Mengchu Zhou

Program General Co-chair

New Jersey Institute of Technology Newark, USA

zhou@njit.edu

Technical Areas Program Committee

Ching-Chih Tsai

System Science and Engineering Track Co-chair

National Chung Hsing University

cctsai@nchu.edu.tw

Giancarlo Fortino

Human-Machine Track Co-chair

University of Calabria, Italy

giancarlo.fortino@unical.it

Plamen Angelov

Cybernetics Track Co-chair

Lancaster University, United Kingdom

p.angelov@lancaster.ac.uk

IEEE SMC
Systems, Man, and Cybernetics Society

IEEE

寄件者: ISONAET-2024
收件者: cctsai@nchu.edu.tw
主旨: Plenary or Keynote Speaker Invitation for ISONAET-2024
日期: 2023年11月6日 下午 01:34:59

Dear Dr. Ching-Chih Tsai,

Good day to you,

We hope this email finds you well. It is a great pleasure to invite you as a **Plenary/Keynote Speaker** for our upcoming "**1st International Summit on Applied Science, Engineering and Technology**" which will be held on September 9-10-2024 at Paris, France. This conference will be in virtual mode at the same time.

For conference website, visit: https://scitechglobalmeets.com/2024/applied-science/

We came across your work on numerous high-profile projects and were impressed with your expertise in creating innovative designs that are not only visually stunning but also functionally efficient. We would be honored to have you as a keynote/plenary speaker at the seminar. Your vast experience and knowledge would be of great benefit to the participants. We would like to invite you to deliver a lecture on any interesting topic as part of the seminar program.

The aim of the ISONAET-2024 is to promote quality research and real-world impact in an atmosphere of true international cooperation between scientists and engineers by bringing together again the world class researchers, International Communities and Industrial heads to discuss the latest developments and innovations in the fields of Applied Science, Engineering and technology.

We sincerely hope that ISONAET-2024 serves as an international platform for meeting researchers from around the world, widen professional contact and create new opportunities, including establishing new collaborations.

We understand that you are a busy person, but we would appreciate it if you could confirm your participation as soon as possible so that we can finalize the technical program and make necessary arrangements for your talk duration and 30% discount on your registration fee.

Thank you for considering our invitation. We look forward to your positive response.

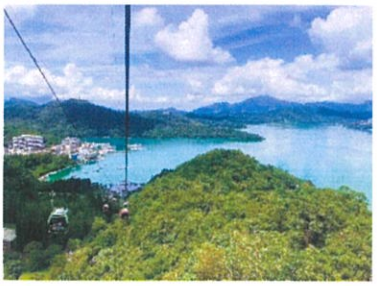
Warm regards,
K. Mani Babu
Conference Secretary

The 12th International Conference on Awareness Science and Technology (iCAST 2023)

Program

Nov.9, 2023			
Time	Event		Site
The registration desk will be open from 08:40			International Conference Hall
9:30~10:00	Welcome & Opening Remarks		International Conference Hall
10:00~10:50	Keynote Speech【I】 Invited Speaker： Professor YOSHIOKA Rentaro, University of Aizu, Japan Chair: Prof. Shing-Hong Liu		International Conference Hall
10:50~11:00	Tea/Coffee Break		
11:00~11:50	Keynote Speech【II】 Invited Speaker：Dr. Hui Yu, University of Portsmouth, UK Chair: Prof. Rung-Ching Chen		International Conference Hall
11:50~12:50	iCAST Conference Lunch		
12:50~14:20	**Session A1** Topic C I : Awareness Related Application **Room A:** V-308 (3F)	**Session B1** SS3: Applications of Artificial Intelligence and Internet of Things for a Sustainable Future **Room B:** V-307 (3F)	**Session C1** SS4: Applications of Artificial Intelligent Networks and Communication Systems (AAINCS) **Room C:** V-304 (3F)
14:20~14:30	Tea/Coffee Break		
14:30~15:30	**Session A2** 國科會學門成果發表 I National Science and Technology Council Discipline Achievements Presentation I **Room A:** V-308 (3F)	**Session B2** SS1: Using Deep Learning for Various Data Sources in Smart Applications **Room B:** V-307 (3F)	**Session C2** SS5: Knowledge Engineering & AI Application (KEAIA) **Room C:** V-304 (3F)
15:30~15:40	Tea/Coffee Break		
15:40~16:40	**Session A3** 國科會學門成果發表 II National Science and Technology Council Discipline Achievements Presentation II **Room A**: V-308 (3F)	**Session B3** SS1: Using Deep Learning for Various Data Sources in Smart Applications **Room B:**V-307 (3F)	**Session C3** SS5: Knowledge Engineering & AI Application (KEAIA) **Room C:**V-304 (3F)
Boxed Meal			

Nov.10, 2023			
Time	Event		Site
The registration desk will be open from 08:40			International Conference Hall
9:00~09:50	Keynote Speech【III】 Speaker: Prof. H. Y. Mark Liao Academia Sinica, Taiwan Chair: Prof. Long-Sheng Chen		International Conference Hall
09:50~10:00	Tea/Coffee Break		
10:00~11:00	Panel Discussion Keynote Speech: Prof. Goutam Chakraborty		International Conference Hall
11:00~11:10	Tea/Coffee Break		
11:10~12:00	Keynote Speech【IV】 Speaker: Prof. Ching-Chih Tsai National Chung Hsing University Chair: Prof. Shih-Cheng Horng		International Conference Hall
12:00~12:50	iCAST Conference Lunch		
12:50~13:50	**Session A4** SS2: Deep Learning Technology for Biomedical Signals and Images Applications **Room A:** V-308 (3F)	**Session B4** SS6: Artificial Intelligent Enabled Communication Systems **Room A:** V-307 (3F)	**Session C4** SS7: Advanced Machine Learning and Applications **Room A:** V-304 (3F)
13:50~14:00	Tea/Coffee Break		
14:00~15:30	**Session A5** SS2: Deep Learning Technology for Biomedical Signals and Images Applications **Room A:** V-308 (3F)	**Session B5** Topic C II: Awareness Related Application **Room A:** V-307 (3F)	**Session C5** Topic A: Awareness Science **Room A:** V-304 (3F)
15:30~15:40	Tea/Coffee Break		
15:40~17:10	**Session A6** SS2: Deep Learning Technology for Biomedical Signals and Images Applications **Room A:** V-308 (3F)	**Session B6** Topic C III: Awareness Related Application **Room A:** V-307 (3F)	**Session C6** Topic B: Awareness Technology **Room A:** V-304 (3F)
18:00-Banquet: Kikuzono Restaurant			

<table>
<tr><td colspan="4">Nov.11, 2023</td></tr>
<tr><td>Time</td><td>Event</td><td>Site</td><td>Excursion</td></tr>
<tr><td>8:30~09:30</td><td>女力論壇
專題演講：「促進科技平等：女性在科研領域的角色、經驗和挑戰」
主講者：呂慈純教授
Women's Forum: “Promoting Technological Equity: The Roles, Experiences, and Challenges of Women in the Field of Scientific Research”
Speaker: Prof. Tzu-Chuen Lu</td><td>Information Building Room M309</td><td rowspan="3">Sunmoonlake
07:00~15:00
  </td></tr>
<tr><td>9:30~10:30</td><td>女力論壇：開放式小組討論
Women's Forum: Panel discussion</td><td>Information Building Room M309</td></tr>
<tr><td>10:30~11:00</td><td>Summarizing and Action Plan to Support and Promote Gender Equality in the Field of Scientific Research</td><td>Information Building Room M309</td></tr>
<tr><td colspan="4">Closing</td></tr>
</table>

蔡清池

附件十二

C. C. Tsai

寄件者: Edward Tunstel <tunstel@ieee.org>
寄件日期: 2023年1月19日星期四 上午 8:51
收件者: Edward Tunstel
主旨: Fellow Evaluation Committee - 2023

Dear Members of the 2022 FEC,

I trust all is well with you and yours and that this new year is off to a good start for you.

I am writing to find out whether you are interested and available to serve on the FEC again for 2023. I would need to knowbefore the end of January in order to provide your name as such on a list of 2023 FEC members to the SMC Society President.

I look forward to your reply!

Best regards,

Eddie

附件十三

TICPS Editorial Board

(as of December 21, 2022)

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To be appointed by EiC

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The IEEE Transactions on Industrial Cyber-Physical Systems (TICPS) publishes original papers related to a broad range associated with the industrial cyber-physical systems (ICPS) knowledge domain. Industrial Cyber-Physical Systems are the engineered systems that are built from, and depend upon, the seamless integration of computation and physical components. Example areas of interest include but are not limited to

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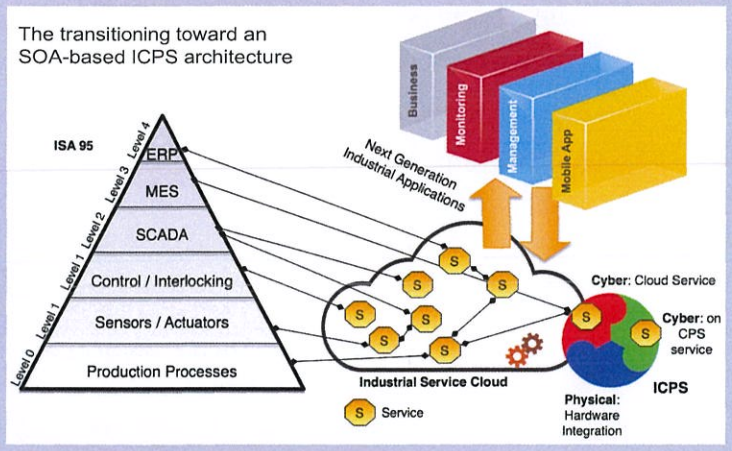

About the journal

The articles in this journal are peer reviewed in accordance with the requirements set forth in the IEEE PSPB Operations Manual (sections 8.2.1.C & 8.2.2.A). Each published article was reviewed by a minimum of two independent reviewers using a single-blind peer review process, where the identities of the reviewers are not known to the authors but the names and affiliations of the authors are known to the reviewers. Submitted articles will be screened for plagiarism before review process.

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ICPS seeks scholarly papers that report original research results related to the broad scope associated with the ICPS knowledge domain. TICPS also seeks proposals for special issues. Details for proposing a special issue will soon be available.

Manuscripts submitted to TICPS cannot have been published previously or are under consideration for publication elsewhere. Since IEEE must own the copyright of the technical contributions that it publishes, an electronic Copyright Form must be submitted at the time of manuscript submission. While the official launch date for TICPS (the inaugural issue) is February 2023, the manuscript submissions site https://mc.manuscriptcentral.com/ticps will be ready to accept submissions ~~within a few weeks~~. on December 5th 2022.

Contact the EiC, Okyay Kaynak, at okyay.kaynak@boun.edu.tr for questions and additional information.

附件十四

C. C. Tsai

寄件者: Garai Valéria <garai@uni-obuda.hu>
寄件日期: 2023年1月28日星期六 下午 11:06
收件者: Nelly Flumo
副本: azad@gatech.edu; e.perkins@ieee.org; cctsai@nchu.edu.tw; Prof. KWONG Tak Wu Sam; Tom Gedeon; Kevin Wong
主旨: FW: Appointment of 2023-24 Representative for IEEE Nanotechnology Council

This message is being sent on behalf of Prof. Sam Kwong, SMC Society President
****

Dear Edward G Perkins,

I would like to reappoint Ching-Chih Tsai to be the Nanotechnology Council Representative of SMC Society : Ching-Chih Tsai (2023-2024) cctsai@nchu.edu.tw

Regards,

Sam Kwong
President, IEEE Systems, Man and Cybernetics

From: Nelly Flumo <nflumo@TALLEY.com>
Sent: Friday, 27 January 2023 6:24 AM
To: Prof. KWONG Tak Wu Sam <cssamk@cityu.edu.hk>
Cc: azad@gatech.edu
Subject: Appointment of 2023-24 Representative for IEEE Nanotechnology Council
Importance: High

Greetings,

Your Society is one of the 22 member Societies of the IEEE Nanotechnology Council (NTC). Attached is an information brief about the NTC. Our website is http://ieeenano.org/. Fabrizio Lombardi is NTC President for 2022-23.
The NTC AdCom is the governing body which among other duties, selects the NTC President-elect and other officers. The next AdCom will be in July at the NANO 2023 Conference being held in Jeju, Korea.

Each member Society, via its President, appoints two (2) representatives to the NTC AdCom, each for 2-year overlapping terms and whom you support to attend the annual NTC AdCom meeting. **NOTE: We also make the meeting available via Webex.** One representative is designated as the voting member for cases where both attend the Adcom or for online and email voting.

One representative is appointed in even years and the other representative in odd years. **The term is for 2 years.** NOTE: Representatives can be reappointed for additional 2-year terms.

The term of Azad Naeemi the SSC odd-year and voting representative, expired on 31-Dec-22. Your even-year representative position is vacant and has been vacant since December 31, 2020. We urge you to appoint someone to both positions.

As a major IEEE technical society and with joint activities with NTC, we would expect your Society to have both positions filled.
I look forward to hearing from you regarding your 2023-24 odd-year NTC AdCom representative appointment and voting member designation.

Thank you,

Nelly Flumo

sent on behalf of

Edward G Perkins
NTC Secretary
e.perkins@ieee.org

寄件者: Prof.ssa Mariagrazia Dotoli
收件者: Dimitar Filev; flamminifra@hotmail.com; Ching-Chih Tsai; sfsu-ntust
主旨: Meeting of SMCS DLP committee in Honolulu
日期: 2023年9月29日 下午 08:32:03

Dear Dimitar, Francesco, Ching-Chih and Shun-Feng,

Will you be in Honolulu for SMC2023?
I propose that the Distinguished Lecture Program committee meets on Monday afternoon just after lunch, with the people who will be present at the conference.
Are you available?

Thanks

Mariagrazia

Prof. Ing. Mariagrazia Dotoli, Ph.D.
Full Professor in Automation
Coordinator of the Italian National PhD Program on Autonomous Systems (DAUSY)
DEI - Politecnico di Bari 200 Via Re David 70125 Bari - Italy
Voice +39 080 596 3667 (office), +39 080 596 3843 (D&C Lab) Fax +39 080 596 3410
Email mariagrazia.dotoli@poliba.it, Skype mariagrazia.dotoli
Personal web site http://dclab.poliba.it/people/mariagrazia-dotoli/
D&C Lab web site http://dclab.poliba.it/
Scopus Researcher ID http://www.scopus.com/authid/detail.url?authorId=6603204493
DAUSY Italian National PhD Program web page http://dausy.poliba.it/

General chair, CASE2024 20th IEEE International Conference on Automation Science and Engineering
Bari, Italy, August 28th-September 1st, 2024 https://2024.ieeecase.org/

Female researchers in EU https://sciencebusiness.net/news-byte/women-make-only-33-researchers-eu
Women in science and engineering in the EU https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210210-1

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寄件者:	Vilém Novák
收件者:	Janusz Kacprzyk
副本:	Ching-Chin Tsai; Marek Reformat; Humberto Bustince; Masahiro Inuiguchi; Susana Montes; Novák Vilém; Kreinovich, Vladik; Luis Magdalena; Tomoharu Nakashima
主旨:	Re: IFSA Fellows
日期:	2023年7月3日 下午 01:47:45

Dear Janusz, dear friends,

I support this suggestion, I am convinced that this is a very good
choice and all the
candidates will be distinguished holders of this prestigious award.

Best wishes

Vilem

ne 2. 7. 2023 v 14:36 odesílatel Janusz Kacprzyk
<Janusz.Kacprzyk@ibspan.waw.pl> napsal:
>
> Dear Ching-Chih, Dear IFSA Council Members,
>
> On behalf of the IFSA Fellows Committee (Chair: Janusz Kacprzyk, Members:
> Laszlo T. Koczy, Ching-Teng Lin, Takeshi Yamakawa and Ronald R, Yager)
> I wish to infor you that after a thorough deliberation and review process
> we have selected as the 2023 receipients of the prestigious IFSA Fellowship
> the following persons:
>
> Prof. Ching-Feng Juang
> Department of Electrical Engineering
> National Chung Hsing University
> Taichung City, Taiwan
>
> Prof. Eyke Huellermeier
> Department of Computer Science
> Ludwig-Maximilians-Universität München
> Munich, Germany
>
> Prof. Huchang Liao
> Business School
> Sichuan University
> Chengdu, China
>
> Prof. Weldon Lodwick
> Department of MAthematical and Statistical Sciences
> University of Colorado Denver
> Denver, USA
>
> Prof. Marek Reformat
> School od Electrical and Computer Engineering
> University of Alberta
> Edmonton, Canada
>
> Prof. Wei-Yen Wang
> Department of Electrical Engineering
> National Taiwan Normal University
> Taipei, Taiwan
>
>
> We are fully convinced that the awardees selected belong to the top

> researchers and scholars in the broadly perceived field of fuzzy sets and
> systems.
>
> Please proceed with further formal arrangements related to the awarding of
> the IFSA Fellowship as specified by the appropriate IFSA rules and regulations.
>
> Best regards.
>
> Sincerely yours,
>
> Janusz
>
> --
> -----
> -----
> Professor Janusz Kacprzyk, Ph.D., D.Sc., Dr h.c. mult.
>
> Fellow of IEEE, IET, IFSA, EurAI, IFIP, AAIA, SMIA
> Full Member, Polish Academy of Sciences
> Member, Academia Europaea
> Member, European Academy of Sciences and Arts
> Member, European Academy of Sciences
> Member, International Academy for Systems and Cybernetics
> Sciences (IASCYS)
> Foreign Member, Bulgarian Academy of Sciences
> Foreign Member, Spanish Royal Academy of Economic
> and Financial Sciences (RACEF)
> Foreign Member, Finnish Society of Sciences and Letters
> Foreign Member, Royal Flemish Academy of Belgium for
> Science and the Arts (KVAB)
> Foreign Member, National Academy of Sciences of Ukraine
> Foreign Member, Lithuanian Academy of Sciences
>
> President, Polish Operational and Systems
> Research Society
> Past President of IFSA (International
> Fuzzy Systems Association)
>
> Systems Research Institute
> Polish Academy of Sciences
> ul. Newelska 6
> 01-447 Warsaw
> Poland

寄件者: cwtao
收件者: Bor-Sen Chen; Toshio Fukuda; Han-Pang Huang; Laszlo T. Koczy; Tsu-Tian Lee; Chin-Teng Lin; H.T. Nguyen; Witold Pedrycz; Jeffrey J.P. Tsai; Gwo-Hshiung Tzeng; Hsiao-Fan Wang; Ronald Yager; John Yen; Wei-Yen Wang; Jin-Tsong Jeng; Chia-Feng Juang; C.W. Tao; Shun-Feng Su; Wen-June Wang; Chen-Chia Chuang; Choon Ki Ahn; Wen-Jer Chang; Weiwei Che; Chih-Chiang Chen; Shyi-Ming Chen; Syuan-Yi Chen; Francisco Chiclana; Jyh-Horng Chou; Shuo-Yan Chou; I-Fang Chung; Zhiguang Feng; Pankaj Gupta; Francisco Herrera; Rami Al-Hmouz; Tzung-Pei Hong; Chen-Chien Hsu; Hsu-Chih Huang; Shyh-Jier Huang; Yo-Ping Huang; Kao-Shing Hwang; Hamid Reza Karimi; Li-Wei Ko; H.K. Lam; Chang-Shing Lee; Pei-Jun Le; Zne-Jung Lee; Deng-Feng Li; I-Hsum Li; T.-H.S. Li; Xiaojian Li; Yongming Li; Hongjing Liang; Huchang Liao; Cheng-Jian Lin; James Jiann-Haw Liou; Peide Liu; Cheng-Kai Lu; Luis Martínez; Hong Mo; Ping-Feng Pai; Yongping Pan; Jindong Qin; Rosa M. Rodríguez; Haobin Shi; Mu-Chun Su; Wei Sun; Zong-Yao Sun; Shaocheng Tong; Ching-Chih Tsai; Enrique Herrera-Viedma; Ning Wang; Zhaojie Ju; Rong-Jyue Wang; Yueying Wang; Yu-Long Wang; Ching-Chang Wong; Jeng-Lang Wu; Zongze Wu; Xiangpeng Xie; Jinquan Xu; Zeshui Xu; Chenguang Yang; Jiali Yu; Jin-Xi Zhang; Weihai Zhang; Zhengqiang Zhang; Qi Zhou; Rong-Jong Wai; Hao-Wen Luo
主旨: Support required from EIC of IJFS
日期: 2024年1月3日 下午 02:24:04

Dear Associate Editors and Colleagues:

Sincerely wish you all a Happy New Year 2024!

Thank you very much for your great contributions to have the International Journal of Fuzzy Systems getting better and better. With your effort, the IJFS has become a desirable publication outlet for many researchers around the world . It is my great honor to have the chance to be the EIC of IJFS and I know that would be a heavy duty to get higher ranking for IJFS. Therefore, your continuing support would be most important to promote IJFS.

Since authors would appreciate the quick responses for their paper submission, and we have more than one thousand paper submissions in one year, I think more AEs are required to accelerate the review process. Also, the good paper quality is essential to increase the reference rate of IJFS papers. Thus I would like to invite you all to recommend possible AE candidates for IJFS. With the help of new AEs, I hope that the paper review process would not be a demanding load for AEs. Moreover, I would like to encourage you to submit your successful achievements to IJFS to impress readers of IJFS.

Further, if there is any suggestion, please do not hesitate to let me know. I would consider suggestions carefully to refine our systems, policies, to make improvements for IJFS.

I would like to express my thankness to Prof. Wang for his great service as the EIC of IJFS in last three years. He has made the IJFS well known as a significant world-wide Journal. He also provided a systematic approach to simplify the paper review process.

Finally, I would appreciate your continuing supports and contributions. Let us work together to have IJFS a better Journal.

Best regards,

C.W. Tao
Department of Electrical Engineering
National ILan University

Dear Prof. Chen:

On behalf of the IEEE SMCS TC on Intelligent Learning in Control Systems, I am very delightful to wholeheartedly support the work of iFUZZY2024, organized by Taiwan Fuzzy Systems Association and National Taiwan Normal University, Taiwan. Thank you very much for your efforts on IEEE SMCS and our TC.

Best Regards,

Ching-Chih Tsai

Ching-Chih Tsai, Ph.D, Fellow of IEEE, CACS, RST and TFSA.
Life Distinguished Professor, National Chung Hsing University (NCHU), Taiwan.
President, International Fuzzy Systems Association.
Chair, IEEE SMCS TC on Intelligent Learning in Control Systems.
BoG member (2022-2024), IEEE SMCS
Chair (2022), DLP, IEEE SMCS.
Member, IEEE SMCS Outstanding Service Awards Subcommittee
BoG member, IEEE Nanotechnology Council.
Chair, Taichung Chapter, IEEE SMCS.
Vice Director, Award Winners Committee, Chinese Institute of Engineers.
Executive Supervisor, Taiwan Automation Intelligence and Robotics Association (TAIROA), Taiwan
Executive Supervisor, Robotics Society of Taiwan.
Executive Supervisor, Chinese Automatic Control Society
Executive Supervisor, Taiwan Systems Association.
BoG member, Taiwan Fuzzy Systems Association.
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AE, IEEE Transactions on Industrial Cyber-Physical Systems
AE, International Journal of Fuzzy Systems.
AE, International Journal of Electrical Engineering
Mobile Phone:+886-919-986511
email:cctsai@nchu.edu.tw

Dear Prof. Lin:

On behalf of the IEEE SMCS TC on Intelligent Learning in Control Systems, I am delighted to wholeheartedly support the work of Advanced Robotics and Intelligent Systems 2024 (ARIS 2024), organized by the Robotics Society of Taiwan and the National Taiwan University. Thank you very much for your efforts on IEEE SMCS and our TC.

Best Regards,

Ching-Chih Tsai

Ching-Chih Tsai, IEEE Fellow
Chair, IEEE SMCS TC on Intelligent Learning in Control Systems
Distinguished Professor, Department of Electrical Engineering,
National Chung Hsing University,
Tel: +886-4-22859351
Fax: +886-4-22856232
Email: cctsai@nchu.edu.tw

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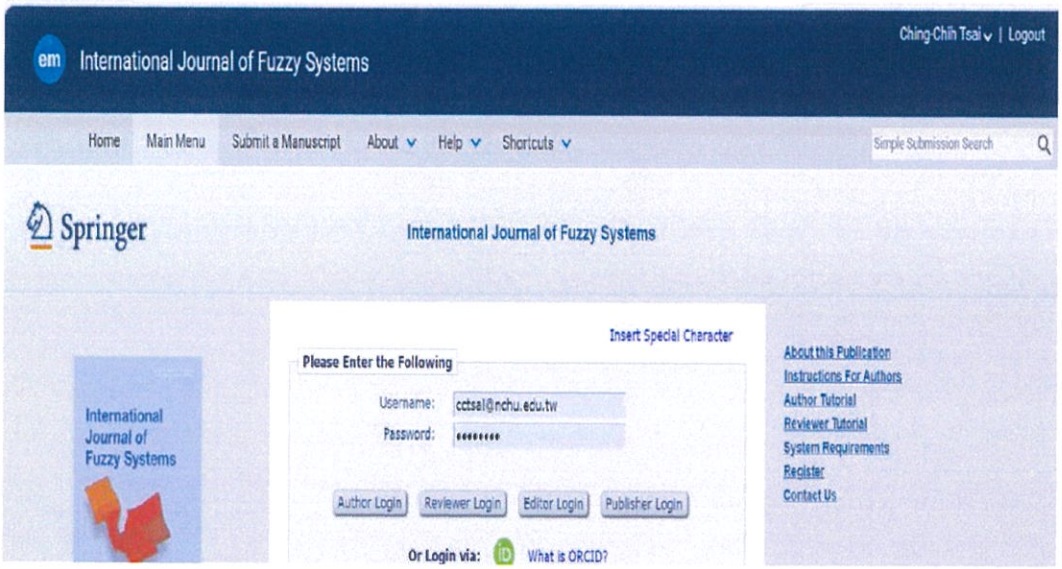
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中興大學電機工程學系 特聘教授 蔡清池

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南臺科技大學

校長吳誠文

中華民國一一三年三月十五日

考試院聘書

考授選特四字第 1121501176 號

茲敦聘

蔡清池先生為 112 年特種考試地方政府公務人員考試審查委員

中 華 民 國 112 年 11 月 30 日

院長 [illegible] 榮村