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### **Research Interests**

Maritime Safety, Navigation Decision-making, Route Planning, Application of MGIS/AIS

### **Education**

Ph.D. in Electrical Engineering, Department of Electrical Engineering, National Taiwan Ocean University, Keelung, Taiwan

### **Work Experience**

- 08/2019~Present **Associate Professor**, Department of Transportation Science, National Taiwan Ocean University
- 08/2016~Present **Director**, Navigation Information Research Center, National Taiwan Ocean University
- 08/2019~Present **Section Director**, Division of Life Guidance Services, National Taiwan Ocean University
- 08/2019~Present **Associate Professor**, Department of Maritime Patrol, Taiwan Police College
- 08/2013~07/2019 **Assistant Professor**, Department of Maritime Patrol, Taiwan Police College
- 05/2011~07/2019 **Assistant Professor**, Department of Transportation Science, National Taiwan Ocean University
- 10/2014~07/2016 **Section Director**, Division of Internship and Career, National Taiwan Ocean University
- 08/2012~10/2014 **Director**, Alumni Service Center, National Taiwan Ocean University
- 08/2011~06/2013 **Assistant Professor**, Department of Navigation, Taipei College of Maritime Technology
- 08/2009~06/2011 **Lecturer**, Department of Navigation, Taipei College of Maritime Technology

### **Publications (Refereed Papers)**

1. S. T. Huang, K. C. Shang, **C. M. Su**, K. Y. Chang, and Y. T. Tzeng, "Applying QFD to assess quality of short sea shipping: An Empirical Study on Cross-Strait high speed ferry service between Taiwan and Mainland China," *International Journal of Shipping and Transport Logistics*. (SCI) (Accepted)
2. 何可樂、張鎧益、梁詩梅、鐘妍、高聖龍、**蘇健民(通訊作者)**，「走遍臺北市米其林餐廳」，地理資訊系統季刊，vol. 13, no. 3, pp.8-16, Jul., 2019.
3. 廖彥廷、何雅薰、蔡岑宇恆、高聖龍、**蘇健民(通訊作者)**，「尋找舒適圈(租屋導覽)—以基隆市中正區為例」，地理資訊系統季刊，vol. 13, no. 3, pp.20-24, Jul., 2019.
4. **C. M. Su**, K. Y. Chang, S. L. Kao, and C. Lin, "A Study on Seaworthiness of The Kinmen-Xiamen Fairways by Fuzzy Method," *Journal of Marine Science and Technology*, Vol. 27, No. 1, pp. 1-7, 2019. (SCI)
5. **C. M. Su**, S. L. Kao, M. F. Yang, and C. H. Lin, "Empty Containers Inventory System with Fuzzy Demand," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 13-15 March, pp. 537-541, 2019. (EI)
6. S. L. Kao, **C. M. Su**, M. R. Tu, and C. H. Lin, "Empty Container Dispatching Inventory Model in Fuzzy Environment," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 13-15 March, pp. 447-451, 2019. (EI)
7. S. L. Kao, **C. M. Su**, M. F. Yang, and L. A. Chen, "Fuzzy Closed-Loop Supply Chain Considered Container Return Time," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 13-15 March, pp. 381-385, 2019. (EI)
8. H. H. Fang, **C. M. Su**, S. L. Kao, and L. A. Chen, "Integrated Inventory Model for Returnable Transport Items considered Container Return Time and Fuzzy Demand," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 13-15 March, pp. 532-536, 2019. (EI)
9. 黃心皓、張家軒、蔡承錫、洪嘉駿、**蘇健民(通訊作者)**、高聖龍，「兩都砲窠」，地理資訊系統季刊，vol. 13, no. 1, pp.8-13, Jan., 2019.
10. 巫鎧宇、彭淑妍、吳佳穎、邱靖翔、**蘇健民(通訊作者)**、高聖龍，「基「榮」再現—基隆市觀光地圖導覽」，地理資訊系統季刊，vol. 13, no. 1, pp.20-26, Jan., 2019.
11. 沈惠萱、藍知宇、蔡嘉祐、黃梓勛、**蘇健民(通訊作者)**、高聖龍，「水上

- 汽機車之原來你是這樣的海大”，地理資訊系統季刊，vol. 12, no. 4, pp.28-35, Oct., 2018.
12. **C. M. Su**, K. Y. Chang, Y. T. Chou, and Y. S. Pan, "Multi-vendor and Multi-buyer Collaborative Planning Forecasting and Replenishment Model," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 16-18 March, pp. 841-845, 2016. (EI)
  13. **C. M. Su**, K. Y. Chang, and Y. H. Chang, "Applying Possibilistic Linear Programming to Multi-objective New Ship of Sign on Proceeding Project Management Problem," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 16-18 March, pp. 867-871, 2016. (EI)
  14. 蘇健民、陳文崇、張啟隱，“港勤拖船總體績效探討之研究”，航運季刊，vol. 24, no. 4, pp. 113-132, 2015.
  15. K. Y. Chang, **C. M. Su**, G. E. Jan, and C. P. Chen, "An Efficient Method for Single-facility Location and Path-connecting Problems in a Cell Map," *International Journal of Geographical Information Science*, vol. 27, no.10, pp.2060-2076, 2013. (Impact Factor 3.545, GEOGRAPHY, PHYSICAL, 17/50)(SSCI, SCI)
  16. M. F. Yang, **C. M. Su**, M. C. Lo, H. H. Lee, and W. C. Tseng, "Integrated Inventory Model with Decreasing Probability of Imperfect Maintenance in a Supply Chain," *Lecture Notes in Engineering and Computer Science*, Hong Kong, 13-15 March, 2203, pp. 959-963, 2013. (EI)
  17. **C. M. Su**, K. Y. Chang, and C. Y. Cheng, "Fuzzy Decision on Optimal Collision Avoidance Measures for Ships in Vessel Traffic Service," *Journal of Marine Science and Technology*, vol. 20, no. 1, pp. 38-48, 2012. (SCI-E)
  18. 蘇健民、高聖龍、張啟隱、鄭智湧，“海洋地理資訊系統應用於船舶復航決策”，航運季刊，vol. 19, no. 2, pp. 23-38, 2010.
  19. M. C. Tsou, S. L. Kao, and **C. M. Su**, "Decision Support from Genetic Algorithms for Ship Collision Avoidance Route Planning and Alerts," *Journal of Navigation*. vol. 63, no. 1, pp.167-182, 2010. (SCI)(Impact Factor: 0.61)
  20. 蘇健民、施建龍、詹景裕，“具海象資料之電子海圖上航路規劃”，航運季刊，vol. 18, no. 3, pp.1-15, 2009.
  21. 高聖龍、邱柏翰、蘇健民，“船舶載具自動避碰安全系統解析”，船舶與海運通訊，第 63 期, pp.2-4, 2009.
  22. 邱柏翰、高聖龍、蘇健民，“海洋地理資訊系統於電子海圖之研究”，地理資訊系統季刊，vol. 3, no. 1, pp.16-20, Jan., 2009.

23. 潘志恒、蘇健民、張啟隱，「出口儲區整櫃作業規劃之研究」，航運季刊，vol. 17, no. 4, pp.25-54, 2008.
24. K. Y. Chang, G. E. Jan, **C. M. Su**, and Ian Parberry, "Optimal Interceptions on Two-Dimensional Grids with Obstacles," *Journal of Navigation*, vol. 61, no. 1, pp.31-43, 2008. (SCI) (Impact Factor: 0.61)
25. G. E. Jan, B. S. Hung, **C. M. Su**, and F. Y. Lin, "Optimal Chasing and Path Planning Algorithms for Aircrafts in Quadric Surface," *Journal of Aeronautics, Astronautics and Aviation, Series B*, vol. 39, no. 2, pp.115-122, 2007. (EI) (in Chinese) (*Written by Chien-Min Su*)
26. G. E. Jan, T. Y. Juang, J. D. Huang, **C. M. Su**, and C. Y. Cheng, "A Fast Path Planning Algorithm for Piano Mover's Problem on Raster," *Proceeding of the IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2005)*, pp.522-527, Monterey, California, USA, July, 2005. (EI)
27. P. H. Yang, S. S. Hu, **C. M. Su**, and J. Y. Juang, "On the Nonlinear  $H_\infty$  Controller Design for a Ship Course-keeping Problem Via Energy Dissipation Approach", 中國造船暨輪機工程學刊，第二十卷第一期，Taiwan, R.O.C., Feb. 2001. (EI)
28. 莊政義、蘇健民、游志聖，「雙自由度動態控制器設計之研究」，海運研究學刊，第一期(創刊號), pp. 103-120, 台北市, 1996.

### **Publications (Conference Papers)**

1. Tai-Yuan Shao, Sheng-Long Kao, and Chien-Min Su, "Taiwan AIS CubeSat Tracking System for Marine Safety," *2019 International Conference on Intelligent Computing and its Emerging Applications (ICEA2019)*, pp.70-73, Tainan, Taiwan, 30 Aug.-01 Sep., 2019.
2. Meng-Ru Tu, Sheng-Long Kao, Chien-Min Su, Jia-Lin Lin, and Yung-Shang Cheng, "Fuzzy Crossing Priority for Inland River Bridge," *2019 International Conference on Innovative Computing and Management Science (ICMS2019)*, Osaka, Japan, 19-22 Jul., 2019.
3. 高聖龍、鄭詠尚、牟軍敏、蘇健民，「模糊區分法建立內陸河船舶橋樑通過之優先順序指標」，2018 海峽兩岸第六屆海事風險評估與管理研討會，pp.264-272, 海洋大學，基隆，臺灣，3-4 Dec., 2018.
4. 高聖龍、蘇健民、鄭詠尚、古介信，「長江內陸河流船舶航行安全與排碳改善之研究」，第十一屆全國節能減排社會實踐與科技競賽，武漢，中國，6-9 Aug., 2018.

5. S. L. Kao, Y. S. Cheng, and **C. M. Su**, "Bridge Crossing Priority Index by Fuzzy Logic Control," *18<sup>th</sup> Asian Conference on Maritime System and Safety Research (ACMSSR)*, pp.23-27, Taipei, Taiwan, 26-27 July, 2018.
6. S. L. Kao, Y. T. Wang, H. T. Shen and **C. M. Su**, "The Optimal Speed for Green Energy Boat in Sun Moon Lake," *18<sup>th</sup> Asian Conference on Maritime System and Safety Research (ACMSSR)*, pp.95-98, Taipei, Taiwan, 26-27 July, 2018.
7. S. C. Ting, C. T. Thanh, and **C. M. Su**, "Equilibrium in Hotelling's Model of Competition and Cooperation in Strategic Liner Shipping Alliances," *The 12<sup>th</sup> International Conference of Eastern Asia Society for Transportation Studies (EASTS2017)*, Ho Chi Minh, Vietnam, 18-21 Sep., 2017.
8. 蘇健民、李靖妍, "以 SWOT 分析探討航運策略聯盟對海運市場之影響", 2017 海空運學術論文研討會, 長榮大學, 台南市, 台灣, Mar. 31, 2017.
9. **C. M. Su**, M. F. Yang, and Y. H. Chang, "Applying Interactive Possibilistic Linear Programming to Fuzzy Multi-objective Naval Architecture Project Management Problem," *The Fifth International Multi-Conference on Engineering and Technology Innovation 2016 (IMETI2016)*, Taichung, Taiwan, 28 Oct.-01 Nov., 2016.
10. S. L. Kao, K. Y. Chang, and **C. M. Su**, "A 3D Fuzzy Grounding Alert System to Ship Maneuvering Based on Shallow Water Point," *The 9<sup>th</sup> International Symposium on Mobile Mapping Technology (MMT 2015)*. pp. 216, Sydney, Australia, 9-11 Dec., 2015.
11. 蘇健民、陳文崇、張啟隱, "拖船業務營運績效探討", 第五屆海洋工程及航海技術研討會, pp.71-76, 海洋大學, 基隆市, 台灣, Nov., 2015.
12. S. T. Huang, Y. T. Tzeng, K. C. Shang, **C. M. Su**, and A. S. Chiou, "Service Quality Assessment in High Speed Vessel Operator: An Empirical Study in Taiwan," *GPRA 2015 Conference on Port and Logistics Connectivity*, Hong Kong, 21-22 May, 2015.
13. **C. M. Su**, A. S. Chiou, S. L. Kao, and K. Y. Chang, "Fuzzy Decision of Collision Avoidance for Ships in Vessel Traffic Service," 2015 年海峽兩岸海上安全暨船舶交通管理研討會, pp.185-198, 臺北, 臺灣, Mar. 2015.
14. 蘇健民、高聖龍、林川, "模糊方法於金廈航道規劃之研究", 中華民國運輸學會 103 年年會暨學術論文國際研討會, pp.1065-1088, 暨南國際大學, 南投, 臺灣, Dec., 2014.
15. 蘇健民、高聖龍、林川, "金廈航道適航性評估之研究", 2014 年海峽兩岸海事風險評估與管理學術研討會, 集美大學, 廈門, 中國, Jun., 2014.

16. 蘇健民(通訊作者)、許惟鈞, “基隆港市旅遊發展策略之研究—地理資訊系統之應用”, 2014 海空運學術論文研討會, 長榮大學, 台南市, 台灣, Mar., 2014.
17. 蘇健民、許惟鈞、廖國凱, “海上搜救實例探析”, 2013 第一屆兩岸國際救生學術研討會暨兩岸救生論壇, 國立臺灣海洋大學, 基隆市, 台灣, Jun., 2013.
18. 蘇健民, “應用 AHP 分析金廈航道系統與助航設施之研究”, 2013 航輪技術發展研討會(專題報告), 台北海洋技術學院, 台北市, 台灣, May., 2013.
19. 蘇健民(通訊作者)、歐陽葵, “應用 AHP 分析金廈航道系統與助航設施之研究”, 2013 海空運學術論文研討會, 國立高雄海洋科技大學, 高雄市, 台灣, Mar., 2013.
20. 林志平、趙延丁、蘇健民(通訊作者), “應用 AHP 建構自動化倉儲評選之研究”, 第十三屆科技與管理學術研討會, 華夏技術學院, 新北市, 台灣, Dec., 2012.
21. 高聖龍、陳婷婷、蘇健民、廖坤靜, “海峽兩岸污染防治之交通安全規劃”, 兩岸海洋污染防治學術交流研討會, 台北, 台灣, Aug., 2010.
22. 高聖龍、蘇健民、蕭力豪、張啟隱, “船舶 3D 擱淺警戒系統應用於近岸航行”, 第七屆十校聯盟航運物流學術研討會, 台北海洋技術學院, 台北, 台灣, Dec., 2009.
23. 高聖龍、蘇健民、邱柏翰, “運轉受限制船舶模糊避碰警示系統之開發”, 第二屆兩岸海上救助打撈技術研討會論文集, pp. 35-53, 台北, 台灣, Nov., 2009.
24. C. M. Su, K. Y. Chang, and C. Y. Cheng, “Fuzzy Decision of Collision Avoidance for Vessels,” *International Symposium on Marine Science and Technology 2009 (ISMST 2009)*, pp. 47-54, Kaohsiung Marine University, Kaohsiung, Taiwan, Nov. 2009.
25. 高聖龍、蘇健民、邱柏翰, “整合 AIS 及 MGIS 應用於港灣油污監控”, 海上污染防治及應急技術研討會, pp. 303-311, 北京, 中國, Oct. 2009.
26. 鄒明城、高聖龍、蘇健民, “遺傳演算法於船舶避碰路徑規劃與預警之研究”, 2009 海峽兩岸智慧型運輸系統學術研討會, pp. 817-832, Feng Chia University, TaiChung, Taiwan, May, 2009.
27. 蘇健民、呂俊德、崔延綸, “大型船舶港外護衛拖船實施可行性之研究”, 第七屆海峽兩岸暨香港航運物流研討會, pp.38-57, 深圳, 中國, Mar., 2009.
28. 邱柏翰、高聖龍、蘇健民, “模糊理論與海洋地理資訊系統應用於漁船航

- 行安全警示之研究”，中華民國運輸學會 97 年年會暨學術論文國際研討會，pp.1287-1300，高雄第一科技大學，Kaohsiung, Taiwan, Dec., 2008. (獲推薦於運輸年會中報告)
29. 高聖龍、蘇健民、邱柏翰，“作業中漁船模糊避碰警示機制之研究”，第五屆中國國際救撈論壇論文集，pp. 72-81，北京，中國，Sep., 2008.
  30. 邱柏翰、高聖龍、蘇健民，“AIS 與 MGIS 整合用於港埠監控”，2008 年中華海員品質提升研討會，pp. 23-32, Taipei, Taiwan, Apr., 2008. (獲選優秀論文獎)
  31. 蘇健民、張啟隱、陳志平、鄭智湧，“網格圖上韋伯點之最佳區位設置規劃”，中華民國運輸學會 96 年年會暨第 22 屆學術論文研討會，pp. 425-440, Youth Activity Center, Taipei, Taiwan, Dec., 2007. (獲推薦於運輸年會中報告)
  32. S. L. Kao, C. M. Su, C. Y. Cheng, and K. Y. Chang, “A New Method of Collision Avoidance for Vessel Traffic Service,” *International Conference on Maritime Technology (ICMT 2007)*, pp. 153-159, Youth Activity Center, Taipei, Taiwan, Nov., 2007.
  33. 謝宛霖、詹景裕、蘇健民、林豐裕，“三度空間中任意形狀飛行器之最佳路徑規劃：多組及權重區域之路徑規劃”，中國機械工程學會第二十三屆全國學術研討會 (CSME 23), B-II pp. 25-30, Kun Shan University, Yung Kang, Tainan County, Taiwan, Nov. 2006.
  34. 洪必松、詹景裕、蘇健民、林豐裕、林靖，“二次曲面之最佳路徑規劃及追截”，中華民國運輸學會九十五年年會暨第二十一屆學術論文研討會，Chung Hua University, HsinChu, Taiwan, Dec., 2006.
  35. 謝宛霖、詹景裕、蘇健民、林豐裕，“三度空間中任意形狀飛行器之最佳路徑規劃 PART I：單球、多球平移及多球旋轉之路徑規劃”，2006 *Symposium on Applications of Information, Management and Communication Technology (SAICT 2006)*, Shu-Te University, Yen Chau, Kaohsiung County, Taiwan, June 2006.
  36. 施建龍、詹景裕、蘇健民、林豐裕，“動態環境網格圖之路徑規劃 PART I：靜態及移動權重區域”，第一屆智慧生活科技研討會 (ILT 2006), pp. 727-734, Taiping, Taichung County, Taiwan, June 2006.
  37. 施建龍、詹景裕、蘇健民、林豐裕，“動態環境網格圖之路徑規劃 PART II：移動障礙物”，第一屆智慧生活科技研討會 (ILT 2006), pp. 1174-1181, Taiping, Taichung County, Taiwan, June 2006.
  38. G. E. Jan, C. M. Su, and C. Y. Cheng, "On the Path Planning Problem for Aircraft Motion," *The 36th International Conference on Computers and*

- Industrial Engineering (ICCIE 2006)* , pp.4734-4745, Howard Hotel, Taipei, Taiwan, R.O.C., June 20-23, 2006. (*Written by Chien-Min Su*)
39. G. E. Jan, T. Y. Juang, **C. M. Su**, and W. R. Liou, “3-Dimensional Shortest Path Searching and Chasing in the Volumes,” *2004 International Computer Symposium (ICS 2004)* , pp. 1392-1397, Tatung University, Taipei, Taiwan, R.O.C., Dec. 2004. (*Written by Chien-Min Su*)
40. G. E. Jan, K. Y. Chang, J. D. Huang, and **C. M. Su**, “Path Planning of Robot Motion for Piano Mover’s Problem on Raster,” *International Conference on Computing, Communications and Control Technologies (CCCT 2004)* , pp. 360-365, Austin, Texas, USA, August 2004. (*Written by Chien-Min Su*)
41. S. S. Hu, P. H. Yang, **C. M. Su**, and J.Y. Juang, “Robust Nonlinear Control Theory Applied to Ship Control,” *2001 Chinese Automatic Control Conference*, pp. 471-476, Chung Cheng Institute of Technology, Tao-Yuan, Taiwan, R.O.C., March 2001.
42. P. H. Yang, S. S. Hu, **C. M. Su**, and J.Y. Juang, “ Nonlinear  $H_{\infty}$  Control Theory Applied to Ship Course-Keeping Problem,” *2000 Automatic Control Conference*, pp. 688-693, National Chiao-Tung University, Hsin-Chu, Taiwan, R.O.C., March 2000.
43. 蘇健民, “漫談海上求生”, 發展國人海洋體育健康休閒活動論文集, 民國八十八年, 海洋大學

## **Professional Services**

1. Reviewer of Journal of Navigation, 2015~ Present
2. Reviewer of Journal of Marine Science and Technology (**JMST**), 2017~ Present
3. Reviewer of Journal of the Fisheries Society of Taiwan (**JFST**), 2019~ Present
4. Instructor of Maritime Development and Training Center, National Taiwan Ocean University, 2018~ Present
5. Instructor of Seafarer Training Center, National Taiwan Ocean University, 1992~2017
6. General Secretary of Taiwan Ocean Conservation Association (**TOCA**) 2010~Present

## **Professional Affiliations**

1. Member of Keelung Ocean Conservation Society (**KOCS**) 2002~Present



2. Member of Taiwan Ocean Conservation Association (**TOCA**) 2007~Present
3. Member of China Maritime Institute (**CMI**) 2011~Present
4. Member of The Association of Marine Affair (**AMA**) 2012~Present

## **Languages**

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Chinese, English, Taiwan