

# Huchang LIAO, PhD

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## Education:

Sep. 2011-Mar. 2015	Shanghai Jiao Tong University	PhD in Management Science & Engineering
Oct. 2013-Oct. 2014	Manchester University (UK)	Joint PhD in Management Science & Engineering
Sep. 2009-Jun. 2011	Kunming University of Science & Technology	Master in Management Science & Engineering
Sep. 2005-Jul. 2009	Guizhou Minzu University	Bachelor in Information & Computing Sciences

## Work Experience:

Sep. 2017-Now	Sichuan University	Research Fellow
Mar. 2018-Jun. 2018	University of Granada (Spain)	Invited Researcher
Feb. 2017-Aug. 2017	University of Manchester (UK)	Academic Visitor
Jan. 2017- Feb. 2017	University of Granada (Spain)	Invited Researcher
Oct. 2015-Now	Sichuan University	Postdoctoral Research Fellow
Jul. 2015- Dec. 2015	University of Technology Sydney (Australia)	Endeavour Postdoctoral Research Fellow
May 2015-Aug. 2017	Sichuan University	Associate Research Fellow
Oct. 2013- Oct. 2014	University of Manchester (UK)	Academic Visitor

## Research interests:

Multiple criteria decision analysis under uncertainty; Business intelligence and data science; Cognitive computing; Fuzzy set and systems; Healthcare management; Evidential reasoning theory with applications in big data analytics, etc.

## Distinctions and Awards:

### ■ International Award

1. 2017 Albert Nelson Marquis Lifetime Achievement Award May 2017
2. Australia 2015 "Endeavour Research Fellowship" (only awarded 243 fellows all around the world in 2015) Nov. 2014

### ■ National Award

3. Candidate of Academic and Technical Leaders in Sichuan Province Jun. 2018
4. Thousand Talents Plan for Young Professionals in Sichuan Province Feb. 2018
5. Outstanding scientific research achievement award in higher institutions (First class in Natural Science) Dec. 2017
6. Wuliangchun outstanding young scholar Award at Sichuan University Dec. 2017
7. Outstanding teaching quality Award at Sichuan University Jul. 2017

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|-----|--|------------|
| 8.  | Sichuan University & Dongtu Academic Innovation Award                                      | Sept. 2016 |
| 9.  | “Program of Young scholars from Renowned Universities or Institutes” at Sichuan University | May. 2015  |
| 10. | “Outstanding Graduate of Shanghai”   | Mar. 2015  |
| 11. | National scholarship for PhD Students  | Nov. 2014  |
| 12. | Excellent PhD Thesis Foundation of SJTU  | Jan. 2014  |
| 13. | National scholarship for PhD Students  | Nov. 2013  |
| 14. | Gu Guohua Scholarship for PhD Students of SJTU   | Jul. 2013  |
| 15. | The State Scholarship Fund of CSC  | May. 2013  |
| 16. | National scholarship for PhD Students  | Nov. 2012  |
| 17. | Excellent Thesis for Master degree in Yunnan Province                                      | Jun. 2013  |
| 18. | Excellent Thesis for Master degree in KMUST  | Sept. 2012 |

### Memberships in Professional Societies:

1. Ranked top 919 in the ESI top 1% of the world's 3248 most influential scientists in the field of Computer Science in Nov 2018
2. Ranked top 6238 in the ESI top 1% of the world's 8687 most influential scientists in the field of Engineering in Nov 2018.
3. Senior Member of the IEEE, Since 2017
4. Member of the IEEE Computational Intelligence Society(IEEE CIS), (ID: 92251481)
5. Member of the IEEE Systems, Man, and Cybernetics Society
6. Member of the IEEE Computer Society Technical Committee on Multiple-Valued Logic (TCMVL)
7. Member of the Association for Computing Machinery(ACM), (ID: 6464470)
8. Member of the Operations Research Society of China(ORSC), (ID: S390020040S)
9. Member of the International Society for Knowledge and Systems Sciences
10. Member of the International Society for Development and Sustainability (ISDS), (ID: M171131)
11. Member of the American Mathematical Society
12. Member of the [Systems Engineering Society of China](#)
13. Council member of the [Operations Research Society of China](#) - Decision Science (中国运筹学会决策科学分会理事), 2016.10-
14. Council member of the [Chinese Academy of Management](#) (CAM)–Society for Management and Decision Sciences (中国管理现代化研究会管理与决策科学专业委员会理事), 2018.8-
15. Council member of the Financial Technology Society of Sichuan (四川省金融科技学会理事), 2017.9-
16. Council member of the Fuzzy Mathematics and Fuzzy Systems Society of China (中国系统工程学会模糊数学与模糊系统专业委员会理事), 2018.7-

### Social Services and Responsibilities:

#### ■ Journal Editor

**AE (6), EBM (15), SE (1), GE (2)**

1. **Associate Editor** of the [International Journal of Fuzzy Systems](#) (Indexed by **SCI** with impact factor: 2.396), from Sept. 2015 to present
2. **Associate Editor** of the [Journal of Intelligent & Fuzzy Systems](#) (Indexed by **SCI** with impact factor: 1.426), from Nov. 2018 to present
3. **Associate Editor** of [TELKOMNIKA \(Telecommunication Computing Electronics and Control\)](#), from April 2017 to present
4. **Associate Editor** of [MedCrave Online Journal of Applied Bionics and Biomechanics\(MOJABB\)](#), from August 2017 to present

5. **Associate Editor** of [Frontiers in Artificial Intelligence](#), from August 2018 to present
6. **Academic Editor** of the [British Journal of Mathematics & Computer Science](#), from July 2016 to present
7. **Editorial Board Member** of [Information Fusion](#) (Indexed by **SCI** with impact factor: 6.639), from June 2017 to present
8. **Editorial Board Member** of [Recent Patents on Engineering](#) (Indexed by **EI**), from December 2016 to present
9. **Editorial Board Member** of [International Journal of Soft Computing, Mathematics and Control](#), from July 2016 to present
10. **Editorial Board Member** of [Asian Journal of Mathematics and Computer Research](#), from November 2016 to present
11. **Editorial Board Member** of [Annals of Fuzzy Mathematics and Informatics](#), from January 2017 to present
12. **Editorial Board Member** of [Austin Journal of Vector Borne Diseases](#), from April 2017 to present
13. **Editorial Board Member** of [Journal of Applied Research on Industrial Engineering](#), from July 2017 to present
14. **Editorial Board Member** of [International Journal of Innovative Trends in Engineering & Research](#), from Nov 2017 to present
15. **Editorial Board Member** of [UPI Journal of Business Management and Computer Applications \(UPI-JBMCA\)](#), from Jan 2018 to present
16. **Editorial Board Member** of [Journal of Mathematical and Statistical Analysis \(JMSA\)](#), from June 2018 to present
17. **Editorial Review Board Member** of [International Journal of Fuzzy System Applications \(IJFSA\)](#) (Indexed by **Scopus**), from August 2018 to present
18. **Editorial Board Member** of [Annals of Biostatistics & Biometric Applications \(ABBA\)](#), from August 2018 to present
19. **Editorial Board Member** of [Resources and Environmental Economics](#), from August 2018 to present
20. **Editorial Board Member** of [Journal of Industrial Engineering and Safety](#), from Sept. 2018 to present
21. **Editorial Board Member** of [Macro Management & Public Policies](#) (Indexed by **ESCI**), from Nov. 2018 to present
22. **Section Editor** of [The Open Computer Science Journal](#), from Nov. 2018 to present
23. **Corresponding Guest Editor** of the Special Issue in [International Journal of Fuzzy Systems](#) (Indexed by **SCI** with impact factor: 2.396) on: "Hesitant Fuzzy Linguistic Decision Making: Algorithms, Theory and Applications". 2017
24. **Guest Editor** of the Special Issue in [Mathematical Problems in Engineering](#) (Indexed by **SCI** with impact factor: 1.145) on: "Recent advances in the application of Biomechanics and Robotics". 2018

■ **Committee Member in International Conferences**

1. The 2016 International Conference on Big Data-Based Healthcare Operations and Logistics Management (2016ICHOLM), Chengdu, Technical Program Committee member and Session Chair, 2016/5/7-5/8. 2016 年大数据背景下的医疗运作与物流管理国际研讨会, 成都, 大会秘书长兼会议主持, 2016/5/7-5/8
2. The First International Conference on Economic and Business Management (FEBM2016), Technical Program Committee member, Qingdao, October 15-17, 2016. <http://www.febm.org/2016/Committee.aspx>
3. The 3rd International Conference on Economics and Management Engineering (ICEME2017), Technical Program Committee member, Wuhan, March 24th-26th, 2017. <http://www.iceme2017.org>
4. The 2nd International Conference on Humanities and Social Science (HSS2017), Shenzhen, February 24-26, 2017. Technical Program Committee member. [www.hss2017.org](http://www.hss2017.org)
5. The 2nd International Conference on Humanities Science, Management and Education Technology (HSMET 2017), September 22-24, 2017, Zhuhai, China. <http://hsmet.org>
6. The 3rd International Conference on Artificial Intelligence and Industrial Engineering (AIIE2017), November 26-27, 2017, Shanghai, China. International Scientific Committee member. <http://www.aiie2017.org/>
7. The 18th Group Decision and Negotiation Conference (GDN 2018), Nanjing, June 9th to 13th, Program Committee member, Session Chair. <http://gdn2018.org>
8. The International Workshop on Medicine and Healthcare (IWMH2018), Hangzhou, June 15-17, Technical Program

Committee (TPC) member. <http://www.iwmh.org/>

9. The 2018 3rd International Seminar on Computer Information Science and Application Technology (ISCISAT 2018), September 28-30, 2018, Zhuhai, China. Technical Program Committee member. <https://www.keoaeic.org/ISCISAT2018>
10. The 2nd International Conference on Computer Science and Application Engineering (CSAE 2018), October 22-24, 2018 in Hohhot, China. Technical Program Committee (TPC) member. <http://www.csaconf.org>
11. The International Conference on New Trends in Soft computing Technologies (ICNTST), March 8-9, 2019, Indore (M.P.), India. International Technical committee member/Reviewer. <http://www.icntst.com>
12. The International Congress and Exhibition on Industrial and Manufacturing Engineering Conference, August 15-16, 2019, Prague, Czech Republic. Organizing Committee Member. <https://scientificfederation.com/iceime-2019/>

#### ■ Activities in National Conferences

1. The 2016 Conference on the Frontier of Operations Research and Management, Anhui, Session Chair, 2016/5/20-5/22. 2016 运筹与管理前沿问题研讨会, 安徽大学数学科学学院, 会议主持, 2016/5/20-5/22
2. The 2016 China Enterprise Operations Research Conference, Chongqing, Keynotes Speaker, 2016/8/4-8/7. 2016 中国企业运筹学第十一届学术交流大会, 重庆理工大学管理学院, 大会报告, 2016/8/4-8/7
3. The 17<sup>th</sup> International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU2018), June 11 to 15<sup>th</sup>, 2018, Cadiz, Spain.

#### ■ Journal Referee

1. Advances in Research
2. Advances in Fuzzy Sets and Systems
3. African Journal of Business Management
4. Afrika Matematika
5. Ain Shams Engineering Journal
6. Algorithms
7. Annals of Fuzzy Mathematics and Informatics
8. Applied Intelligence, (SCI, impact factor: 1.983)
9. Applied Mathematical Modelling, Elsevier, (SCI, impact factor: 2.617)
10. Applied Soft Computing, Elsevier, (SCI, impact factor: 3.907)
11. Architectural Science Review
12. AshEse Journal of Business Management
13. AshEse Journal of Economics
14. Asian Journal of Fuzzy and Applied Mathematics
15. Asian Journal of Mathematics and Computer Research
16. BAOJ Obesity & Weight Loss Management
17. Beni-Suef University Journal of Basic and Applied Sciences
18. British Journal of Applied Science & Technology
19. British Journal of Economics, Management & Trade
20. British Journal of Mathematics & Computer Science
21. Bulletin of the Brazilian Mathematical Society, New Series, (SCI, impact factor: 0.41)
22. Cognitive Computation, (SSCI/SCI, impact factor: 3.479)
23. Cognitive Systems Research, (SCI, impact factor: 1.425)
24. Complex & Intelligent Systems, (ESCI)
25. Complexity, Wiley Online Library, (SSCI/SCI, impact factor: 1.829)
26. Computational Intelligence and Neuroscience, OA, (SCI, impact factor: 1.649)

27. Computer Communication & Collaboration
28. Computers in Human Behavior, Elsevier
29. Computers & Industrial Engineering, Elsevier, (SCI, impact factor: 3.195)
30. Decision Support Systems, Elsevier, (SSCI/SCI, impact factor: 3.565)
31. Economic Research-Ekonomska Istraživanja,
32. Electronic Commerce Research, Springer, (SCI, impact factor: 2.582)
33. Engineering Applications of Artificial Intelligence, Elsevier, (SCI, impact factor: 2.819)
34. Environmental Research, Elsevier, (SSCI/SCI, impact factor: 4.732)
35. European Journal of Operational Research, Elsevier, (SSCI/SCI, impact factor: 3.428)
36. Expert Systems with Applications, Elsevier, (SCI, impact factor: 3.768)
37. Food Engineering Review, (SCI, impact factor: 4.833)
38. Frontiers of Information Technology & Electronic Engineering (SCI, IF: 0.91)
39. Frontiers in Public Health
40. Fuzzy Optimization and Decision Making, Springer, (SCI, impact factor: 2.022)
41. Granular Computing
42. Group Decision and Negotiation, Springer, (SSCI, impact factor: 1.869)
43. IEEE Access, (IEEE, SSCI, impact factor: 3.557)
44. IEEE Transactions on Cybernetics, (IEEE, SCI, impact factor: 8.803)
45. IEEE Transactions on Fuzzy Systems, (IEEE, SCI, impact factor: 8.415)
46. IEEE Transactions on Industrial Informatics, (IEEE, SCI, impact factor: 5.43)
47. Industrial Robot
48. Information, (EI)
49. Information Fusion, (Elsevier, SCI, impact factor: 6.639)
50. Information Sciences, Elsevier, (SCI, impact factor: 4.305)
51. International Journal of Computers and Applications, (EI)
52. International Journal of Computational Intelligence Systems, (SCI, impact factor: 2)
53. International Journal of Decision Support Systems Technology
54. International Journal of Environmental Research and Public Health, (SCI/SSCI, impact factor: 2.145) A2
55. International Journal of Finance and Economics
56. International Journal of Fuzzy Systems, (SCI, impact factor: 2.396)
57. International Journal of Fuzzy System Applications, IGI Global, Google Scholar
58. International Journal of Industrial Engineering-Theory, Applications and Practice, (SCI, impact factor: 0.565)
59. International Journal of Information Technology & Decision Making, (SCI, impact factor: 1.755)
60. International Journal of Machine Learning and Cybernetics, (SCI, impact factor: 2.692)
61. International Journal of Management Science and Engineering Management
62. International Journal of Research in Industrial Engineering
63. International Journal of Systems Science, Taylor & Francis, (SCI, impact factor: 2.185)
64. International Journal of Uncertainty Fuzziness and Knowledge-Based Systems, (World Scientific, SCI, impact factor: 1.159)
65. International Transactions in Operational Research, (SCI, impact factor: 2.4)
66. Iranian Journal of Fuzzy Systems, (SCI, impact factor: 1.27)
67. Journal of Affective Disorders
68. Journal of Applied Research on Industrial Engineering
69. Journal of Basic and Applied Research international

70. Journal of Big Data Research
71. Journal of Cleaner Production, (SCI, impact factor: 5.651)
72. Journal of Computational and Applied Mathematics, Springer, (SCI, impact factor: 1.632)
73. Journal of Computational Methods in Sciences and Engineering (JCMSE)
74. Journal of Experimental & Theoretical Artificial Intelligence (SCI, impact factor: 1.011)
75. Journal of Information Science and Engineering (SCI, impact factor:0.327)
76. Journal of Intelligent Systems
77. Journal of Intelligent & Fuzzy Systems, IOS Press, (SCI, impact factor: 1.426)
78. Journal of King Saud University - Computer and Information Sciences
79. Journal of Management Science and Practice
80. Journal of Network and Computer Applications
81. Journal of Scientific Research and Reports
82. Journal of the Operational Research Society, (SSCI/SCI, impact factor: 1.396)
83. Knowledge-Based Systems, (Elsevier, SCI, impact factor: 4.396)
84. Kybernetics
85. Mathematical and Computational Applications
86. Mathematical Reviews
87. Mathematical Problems in Engineering (SCI, impact factor: 1.145)
88. Measurement
89. Merit Research Journal of Business and Management (MRJBM)
90. Merit Research Journal of Education and Review (MRJER)
91. Natural Hazards, (Elsevier, SCI, impact factor: 2.281)
92. Neural Computing & Applications, (SCI, impact factor: 4.213)
93. Neural Processing Letters, Springer, (SCI, impact factor: 1.787)
94. Omega-International Journal of Management Science, Elsevier, (SSCI/SCI, impact factor: 4.311)
95. Open Geosciences, (SCI, impact factor: 0.696)
96. PLOS ONE (SCI)
97. Quality & Quantity, Springer, (SSCI/SCI, impact factor: 1.072)
98. Recent Patents on Engineering, (EI)
99. Robotica
100. Science of the Total Environment
101. Scientia Iranica, (Elsevier, SCI, impact factor: 0.475)
102. Scientific World Journal
103. Small Enterprise Research
104. Soft Computing, (SCI, impact factor: 2.367)
105. Sustainable Computing, Informatics and Systems (SCI, impact factor: 1.196)
106. Telecommunication Computing Electronics and Control
107. 系统工程理论与实践 (Systems Engineering-Theory & Practice), Chinese journal, (EI)
108. 系统管理学报 (Journal of Systems & Management), Chinese journal
109. 控制与决策 (Control and Decision), Chinese journal (EI)
110. 《江西师范大学学报》(自然科学版)
111. 数学的实践与认识

■ **Conference Referee:**

1. 16th World Congress of the International Fuzzy Systems Association (IFSA) and the 9th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT), 2015.
2. The 2015 International Conference on Fuzzy System and Data Mining (FSDM2015)
3. The 2016 International Conference on Fuzzy System and Data Mining (FSDM2016)
4. The International Conference on Computer Science and Application Engineering (CSAE2017) <http://www.csaconf.org/>

## **Research Grants:**

### ■ **Principal Investigator**

1. Jan. 2018 to Dec. 2021, the **National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the title: *Consistency and interactive decision making theory of hesitant fuzzy linguistic preference relation and its applications in Sichuan liquor brands management and water resources management*, under Grant 71771156, amount: ¥480,000. Duty: **Principal Investigator**
2. Jan. 2016 to Dec. 2018, the **National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the title: *On theory and methods of qualitative decision making based on hesitant fuzzy linguistic information*, under Grant 71501135, amount: ¥174,000. Duty: **Principal Investigator**
3. May. 2016 to Apr. 2019, the **Scientific Research Foundation for Excellent Young Scholars at Sichuan University** (<http://www.scu.edu.cn/>) with the title: *Hesitant linguistic qualitative decision making theory and methodology*, under Grant 2016SCU04A23, amount: ¥200,000. Duty: **Principal Investigator**
4. June. 2016 to June 2018, the **China Postdoctoral Science Foundation** (<http://www.chinapostdoctor.org.cn/>) with the title: *Hesitant fuzzy linguistic qualitative decision making methods and their application in wise health-care management*, under Grant 2016T90863, amount: ¥150,000. Duty: **Principal Investigator**
5. Dec. 2016 to June 2018, the **China Postdoctoral Science Foundation** (<http://www.chinapostdoctor.org.cn/>) with the title: *On decision making theory and methods of probabilistic linguistic term set and its applications*, under Grant 2016M602698, amount: ¥50,000. Duty: **Principal Investigator**
6. Oct. 2018 to Oct. 2019, the **2019 Sichuan Planning Project of Social Science** (<http://www.scskl.cn/>) with the title: *Research on financial risk assessment and decision making of green supply chain management for SMEs in the context of cognitive complex linguistic environment*, under Grant SC18A007, amount: ¥20,000. Duty: **Principal Investigator**
7. June. 2016 to May 2017, the **2016 Sichuan Planning Project of Social Science** (<http://www.scskl.cn/>) with the title: *The application of probabilistic linguistic term set in wise healthcare management in Sichuan Province*, under Grant SC16TJ015, amount: ¥15,000. Duty: **Principal Investigator**
8. June 2018 to May 2020, the **Spark Project of Innovation at Sichuan University** (<http://www.scu.edu.cn/>) with the title: *Clustering algorithms of cognitive complex information under big data environment and their applications in healthcare assessment and decision making*, under Grant 2018hhs-43, amount: ¥100,000. Duty: **Principal Investigator**
9. Aug. 2018 to June 2020, the **2018 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Research Center for System Science and Enterprise Development** (<http://qyfz.scu.edu.cn/>) with the title: *Product innovation design and selection in cognitive complex linguistic environment*, under Grant Xq18A01, amount: ¥100,000. Duty: **Principal Investigator**
10. June. 2018 to June 2020, the **2018 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Sichuan tourism development research center** (<http://lyfz.lsnu.edu.cn/>) with the title: *A Study on the Tourist Behaviour of Chinese Tourists in Countries along the Belt and Road: Based on Complex Linguistic Preference Evaluation Theory*, under Grant LYC18-02, amount: ¥5,000. Duty: **Principal Investigator**
11. June. 2018 to May 2020, the **2018 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Sichuan Research Center for Electronic Commerce and Modern Logistics**

- (<http://wlxyyjjx.cuit.edu.cn/>) with the title: *Interactive decision making theory of intuitionistic multiplicative preference relation and its application in cold chain logistics inventory sharing model assessment and management*, under Grant DSWL18-2, amount: ¥10,000. Duty: **Principal Investigator**
12. June. 2016 to Dec 2017, the **2016 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Research Center for System Science and Enterprise Development** (<http://qyfz.scu.edu.cn/>) with the title: *Research on the brand strategy and brand management of Sichuan liquor*, under Grant Xq16B04, amount: ¥20,000. Duty: **Principal Investigator**
  13. July 2016 to Jun 2018, the **2016 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Research Center for Sichuan Liquor Industry Development** (<http://cjzx.suse.edu.cn/index.aspx>) with the title: *Strategic research on Sichuan liquor enterprise development based on the complex multiple criteria decision making methodologies*, under Grant CJZ16-01, amount: ¥40,000. Duty: **Principal Investigator**
  14. June. 2016 to Dec. 2018, the **2016 Key Project of the Key Research Institute of Humanities and Social Sciences in Sichuan Province--the Research Center for International Transmission of Sichuan Liquor Culture** (<http://cjwhcbjzx.suse.edu.cn/>) with the title: *Strategic management of Sichuan liquor brand based on the complex preference relations*, under Grant CJC2016-02, amount: ¥30,000. Duty: **Principal Investigator**
  15. May. 2015 to Apr. 2018, the **Scientific Research Foundation for Scholars at Sichuan University** (<http://www.scu.edu.cn/>) with the title: *Intelligence computing and decision making methods and their application with complicated fuzzy information*, under Grant YJ201535, amount: ¥150,000. Duty: **Principal Investigator**
  16. Mar. 2016 to Dec. 2017, the **Fundamental Research Funds for the Central Universities** (<http://www.scu.edu.cn/>) with the title: *Qualitative decision making methodologies based on hesitant fuzzy linguistic information and their application in healthcare waste management*, under Grant skqy201649, amount: ¥40,000. Duty: **Principal Investigator**
  17. Jan. 2014 to Dec. 2014, the **Excellent PhD Thesis Foundation from Shanghai Jiao Tong University** (<http://www.sjtu.edu.cn/>) with the project title: *On theory and methods of decision making based on intuitionistic and hesitant fuzzy information*, under Grant 20131216, amount: ¥60,000. Duty: **Principal Investigator**
  18. Jul. 2015 to Dec. 2015, the **Endeavour Postdoctoral Research Fellowship** (<https://endeavour.education.gov.au/endeavour>) with the project title: *Intelligent Computing and Decision Making Systems with Linguistic Information in Business*, under Grant ERF\_PDR\_4282\_2015, amount: ¥110,000. Duty: **Principal Investigator**
  19. Oct. 2013 to Oct. 2014, the **State Scholarship Funding from China Scholarship Council** (<http://www.csc.edu.cn/>) with the project title: *Priority theories of Intuitionistic judgement matrices and its application in multiple criteria decision analysis*, under Grant 61273209, amount: ¥150,000. Duty: **Principal Investigator**
- **Chief Investigator**
20. Jan. 2016 to Dec. 2020, the **Key Project of National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the title: *Research on Big Data-driven Resource Management of Whole Society in Environment and Smart Health Care*, under Grant 71532007, amount: ¥2,230,000. Duty: **Chief Investigator**
  21. Jul. 2016 to Dec. 2020, the **Key Research and Development Project of China from National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the project title: *Comprehensive evaluation method of environmental impact and energy dissipation technology research*, under Grant 2016YFC0401707, amount: ¥3,100,000. Duty: **Chief Investigator**
  22. Jan. 2016 to Dec. 2019, the **National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the title: *Priority theory of intuitionistic judgement matrices and their applications to marine environment risk assessment of China's strategic energy channels*, under Grant 71571123, amount: ¥493,000. Duty: **Chief Investigator**



23. Jan. 2013 to Dec. 2016, the **National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the project title: *Hesitant fuzzy information fusion theory and its application in decision making*, under Grant 61273209, amount: ¥790,000. Duty: **Chief Investigator**
24. Jan. 2011 to Dec. 2013, the **National Natural Science Foundation of China** (<http://www.nsf.gov.cn/>) with the project title: *Intuitionistic fuzzy clustering theory and application*, under Grant 71071161, amount: ¥270,000. Duty: **Chief Investigator**
25. Jan. 2015 to Dec. 2017, the **Young scholar high level academic team construction project at Sichuan University** (<http://www.scu.edu.cn/>) with the title: *Uncertain group decision making theory and methods based on limited rational behaviour*, under Grant skgt201501, amount: ¥200,000. Duty: **Chief Investigator**
26. Jan. 2015 to Dec. 2019, the **Program for Chang Jiang Scholars at Sichuan University** (<http://www.scu.edu.cn/>) with the title: *Priority theory of intuitionistic fuzzy preference relations and its application in decision making*, under Grant YJ201430, amount: ¥750,000. Duty: **Chief Investigator**

### Publications:

Google Scholar citation: **3075**; H-index: **31**; ESI top 1% Highly cited papers: **19**; ESI top 0.1% Hot papers: **5**.

#### ■ Books

- [1] **Huchang Liao** and Zeshui Xu, *Hesitant Fuzzy Decision Making Methodologies and Applications*, Springer, Singapore, 2017.
- [2] **Huchang Liao**. *Hesitant Fuzzy Linguistic Multiple Criteria Decision Making Methods and Applications*. Science Press, China, 2018. (in press. In Chinese)
- [3] **Huchang Liao**. *Intuitionistic Fuzzy Preference Decision Making Theory and Methods*. Science Press, China, 2017. (In Chinese)
- [4] **Huchang Liao**. *Multiple Criteria Decision Making Theory and Methods with Complicated Fuzzy Information*. Science Press, China, 2016. (In Chinese)
- [5] **Huchang Liao** and Zeshui Xu, Consistency and consensus of intuitionistic fuzzy preference relations in group decision making, In: P. Angelov and S. Sotirov (Eds.), *Imprecision and Uncertainty in Information Representation and Processing*, Studies in Fuzziness and Soft Computing, vol. 332, pp. 189-206, Springer, Switzerland, 2016. (**Invited book chapter**)

#### ■ International Journal Papers

Dr. Huchang Liao has published over 100 papers in more than 50 International English Journals and more than 10 Chinese Journals, the following list shows some of his selected representative journal papers.

##### ● 2013 (2) SCI (2); SSCI (0); EI (2); HCP (2); HP (1)

- [1] **H.C. Liao** and Z.S. Xu, A VIKOR-based method for hesitant fuzzy multi-criteria decision making, *Fuzzy Optimization and Decision Making*, vol. 12, no. 4, pp. 373-392, 2013. (**ESI Highly Cited Paper in ISI Web of Science; Hot Paper in ISI Web of Science in July, 2014. SCI WOS: 000326691900002, EI: 20134817033072. Impact factor: 2.163. Google scholar citation: 151. 川大社科等级: C**)
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Dr. Huchang Liao has also published some Chinese Journal papers, such as:

- [100] 廖虎昌, 杨竹, 徐泽水, 顾新. 犹豫模糊语言 PROMETHEE 方法在川酒品牌评价中应用. 控制与决策, 录用. (EI/CSSCI/CSCD)
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