蒋泽

基本信息：

性别： 男　　**出生日期：** 1989 年 5 月　　**电子邮箱：** ze.jiang@unsw.edu.au; ze.jiang@hotmail.com

教育背景：

新南威尔士大学博士，悉尼，澳大利亚
2018–现在（预计 2021 年 6 月）

专业：水利工程
导师：Ashish Sharma (国际水文统计协会主席 President of International Commission of Statistical Hydrology (ICSH-IAHS))，《Journal of Hydrology》和《Water Resources Research》期刊副主编。
荣誉：UIPA 新南威尔士大学全额奖学金
世界排名：学校 43 (2020 QS)；专业 5 (2020 ARWU)

欧盟联合培养硕士
勃兰登堡工业大学，科特布斯，德国
纽卡斯尔大学，纽卡斯尔，英国
尼斯大学，尼斯，法国
2013–2015

专业：水信息和水资源管理 (GPA: 17.2/20.0)
毕业论文：基于 QGIS 环境应用 VC++等流时面积模型的开发和应用
荣誉：优秀毕业生，欧盟伊拉斯莫(Erasmus Mundus)全额奖学金

河海大学工程学士，南京，中国
2008–2012

专业：环境工程 (GPA: 4.5/5.0)
毕业论文：水环境中罗红霉素对大型蚤生长和繁殖的影响
荣誉：河海大学 2012 届优秀毕业生荣誉，国家励志奖学金

研究方向：

- 应用气候模型模拟研究气候变化对水文循环的影响（例如，干旱和洪水）
- 基于小波分析的水文预报新方法和框架
- 海绵城市以及城市洪涝模拟

科研经历：

新加坡国立大学热带海洋科学研究所　　**（2015 年 11 月–2018 年 2 月）**　　**研究工程师**

- 新加坡公共事业局(PUB)的 ABC Water(海绵城市)的效果评估
- 世界银行(IFC,WB)的利用区域气候模型开发基于旱灾保险的指数，用于有效的灾害风险转移
- 新加坡国立大学热带海洋研究所(TMSI)的气候变化对越南湄公河流域粮食产量的影响
- 新加坡公共事业局(PUB)的气候变化对城市洪涝的影响

德国柏林 Ingenieurgesellschaft Prof. Dr. Sieker mbH 公司　　**（2015 年 3 月–2015 年 9 月）**　　**实习生**

- 关于沙特阿拉伯的 Hafar Al-Batin 城市洪水模拟和防洪工程措施
- 基于 QGIS 环境应用 VC++等流时面积模型的开发和应用

论文成果：https://www.researchgate.net/profile/Ze_Jiang3

精选期刊发表文章

1. **Jiang, Z**., Sharma, A., & Johnson, F. (2021). Variable transformations in the spectral domain – Implications for hydrologic forecasting. ***Journal of Hydrology***, *under review*. (SCI, 5.08, 1区)
2. **Jiang, Z**., Rashid, M. M., Johnson, F., & Sharma, A. (2020). A wavelet-based tool to modulate variance in predictors: An application to predicting drought anomalies. ***Environmental Modelling & Software***, 104907. (SCI, 5.32, 1区)
3. **Jiang, Z**., Sharma, A., & Johnson, F. (2020). Refining predictor spectral representation using wavelet theory for improved natural system modelling. ***Water Resources Research***, 56(3), e2019WR026962. (SCI, 4.73, 1 区)
4. Hohl, R., **Jiang, Z**., Tue Vu, M., Raghavan, S. V., & Liong, S. Y. (2020). Using a regional climate model to develop index-based drought insurance for sovereign disaster risk transfer. ***Agricultural Finance Review***, 81(1), 151-168. (SCI, 2.30, 1区)
5. **Jiang, Z**., Sharma, A., & Johnson, F. (2019). Assessing the sensitivity of hydro-climatological change detection methods to model uncertainty and bias. ***Advances in Water Resources***, 134, 103430. (SCI, 4.49, 1区)
6. **Jiang, Z**., Raghavan, S. V., Hur, J., Sun, Y., Liong, S.-Y., Nguyen, V. Q., & Van Pham Dang, T. (2019). Future changes in rice yields over the Mekong River Delta due to climate change - Alarming or alerting? ***Theoretical and Applied Climatology***, 137(1), 545-555. (SCI, 2.73, 2 区)
7. **Jiang, Z**., Molkenthin, F., & Sieker, H. (2016). Urban Surface Characteristics Study Using Time-area Function Model: A Case Study in Saudi Arabia. ***Procedia Engineering***, 154, 911-918. (SCI, 1.04, 会议论文)

学术汇报：

1. Jiang, Z., Sharma, A., & Johnson, F. (2020). Hydro-climatological forecasting: A view from the spectral domain. In ***AGU Fall Meeting 2020***. AGU, Oral presentation, Online, San Francisco, CA, USA, 15 December 2020.
2. Sharma, A., Jiang, Z., and Johnson, F. (2020). Forecasting drought revisited - the importance of spectral transformations to dominant atmospheric predictor variables, ***EGU General Assembly 2020***, Invited talk, Online, 4-8 May 2020, EGU2020-12334.
3. Jiang, Z., Sharma, A., & Johnson, F. (2019). A wavelet-based method to analyse sustained hydrological anomalies under climate change, 23rd International Congress on Modelling and Simulation (***MODSIM***), Oral presentation, Canberra, Australia, 6 December 2019.
4. Jiang, Z., Sharma, A., & Johnson, F. (2019). Drought prediction for improved water resource management: A wavelet-based system prediction approach, ***STAHY 2019***, Oral presentation, Nanjing, Jiangsu, China, 20 October 2019.
5. Jiang, Z., Sharma, A., & Johnson, F. (2018). Assessing the impact of systematic biases in detection of hydrologic change across Australia, ***STAHY 2018***, Oral presentation, Adelaide, South Australia, Australia, 18 September 2018.
6. Jiang, Z., Raghavan, S. V., Hur, J., Sun, Y., & Liong, S.-Y. (2017). Impacts of Climate Change on Rice Crop Yields in Vietnam, ***Asia Oceania Geosciences Society (AOGS) 2017***, Oral presentation, Singapore, 11 August 2017.

著作章节：

1. Raghavan, S. V., Jiang, Z., Hur, J., Liu, J., Nguyen, N. S., & Liong, S.-Y. (2019). ASEAN Food Security under the 2 C-4 C Global Warming Climate Change Scenarios. In V. Anbumozhi, M. Breiling, & V. Reddy (Eds.), Towards a Resilient ASEAN: Disasters, Climate Change, and Food Security: Supporting ASEAN Resilience (Vol. 1, pp. 37-52). Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia.
2. Kim, D., Sun, Y., Wendi, D., Jiang, Z., Liong, S.-Y., & Gourbesville, P. (2018). Flood modelling framework for Kuching City, Malaysia: overcoming the lack of data. In Advances in Hydroinformatics (pp. 559-568): Springer, Singapore.

推荐人：

Professor Ashish Sharma
Future Fellow (ARC) in the School of Civil and Environmental Engineering
Water Research Centre, School of Civil and Environmental Engineering
The University of New South Wales, Sydney, NSW 2052 Australia
T: +61 2 9385 6139; E: a.sharma@unsw.edu.au
My primary supervisor for my Ph.D. at UNSW

Associate Professor Fiona Johnson
Water Research Centre, School of Civil and Environmental Engineering
The University of New South Wales, Sydney, NSW 2052 Australia
T: +61 2 9385 9769; E: f.johnson@unsw.edu.au
My joint supervisor for my Ph.D. at UNSW

Professor Shie-Yui Liong
Deputy Director (2008 – Aug 2019), Tropical Marine Science Institute, National University of Singapore
Founding member and Treasurer of Asia Water Council (2016 – present)
The National University of Singapore, 119077 Singapore
M: +65 9277 6493; E: yui.liong@h2oclimate.org
My supervisor for Research Engineer roles at the National University of Singapore

****