

## 김 석 현



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## 학 력

- 2013 년 7 월 – 2017 년 11 월 **UNSW Sydney\*** 공학박사 (수자원공학/원격탐사)  
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## 주요경력

- 2017 년 4 월 – 현재 **UNSW Water Research Centre** 박사후 연구원
- 2013 년 7 월 – 2017 년 3 월 **UNSW Sydney** 박사과정 (논문제출: 2017/3; 학위수여: 2017/11)
- 2008 년 1 월 – 2013 년 7 월 **현대건설** 대리 토목설계실 수자원/환경 설계담당

## 병역사항

- 2001 년 10 월 – 2004 년 9 월 **대한민국육군** (중위 만기전역)

## 수상 및 장학금

- 2021 년 12 월 **MSSANZ** Early Career Research Excellence (ECRE) Award
- 2021 년 10 월 **UNSW Sydney** Early Career Academic Seed Grants (AUD 1,000)
- 2021 년 5 월 **UNSW Sydney** Strategic Research Fund (AUD 4,000)
- 2017 년 5 월 – 2017 년 8 월 **UNSW Sydney** Postgraduate Writing Fellowship (AUD 8,000)
- 2013 년 7 월 – 2017 년 1 월 **UNSW Sydney** Tuition fee, Stipend and Top-up Scholarship
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## 논 문

[IF-JCR2020/ #Citations ]

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3. Lee S., [Kim S.](#), and Moon S., Development of Car-free Street Mapping (CfSM) Model using an Integrated System with Unmanned Aerial Vehicle, Aerial Mapping Camera and Deep Learning Algorithm, *J. Comput. Civ. Eng.*, Accepted, [4.640/0]
4. [Kim S.](#), Sharma, A., Liu, Y., & Young, S. I. (2021). Rethinking Satellite Data Merging: From Averaging to SNR Optimization, *IEEE Trans. Geosci. Remote Sens.*, Early Access, 1–15, [5.600/1]
5. [Kim S.](#), Dong J., Sharma A. (2021) A triple collocation-based comparison of three L-band soil moisture datasets, SMAP, SMOS-IC, and SMOS, over varied climates and land covers, *Front. Water.*, 3, 64, [–/1]
6. Kim S., Mehrotra R., [Kim S. \(교신\)](#), Sharma A. (2021) Assessing countermeasure effectiveness in controlling cyanobacterial exceedance in riverine systems using probabilistic forecasting alternatives, *J. Water Resour. Plan. Manag.*, 147(10), 04021062, [3.054/0]
7. Kim S., Mehrotra R., [Kim S.](#), Sharma A. (2021) Probabilistic forecasting of Cyanobacterial concentration in riverine systems using environmental drivers, *J. Hydrol.*, 593, 125626, [5.722/1]
8. Zhang R., [Kim S. \(교신\)](#), Sharma A., Lakshmi V. (2021). Identifying relative strengths of SMAP, SMOS-IC, and ASCAT to capture temporal variability using a model combination approach, *Remote Sens. Environ.*, 252, 112126, [10.164/5]

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10. Kim S., Pham H., Liu Y., Marshall L., Sharma A. (2020). Improving the combination of satellite soil moisture datasets by considering error cross-correlation: A comparison between triple collocation (TC) and extended double instrumental variable (EIVD) alternatives, *IEEE Trans. Geosci. Remote Sens.*, Early Access, 1–11, [5.600/3]
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12. Kim S., Kim S.(교신), Mehrotra R., Sharma A. (2020). Predicting cyanobacteria occurrence using climatological and environmental controls, *Water Res.*, 175, 115639, [11.236/10]
13. Kim T., Ley T., Kang S., Davis J., Kim S., Amrollahi P. (2020). Using Particle Composition of Fly Ash to Predict Strength and Resistivity of Concrete, *Cem. Concr. Compos.*, 107, 103493, [7.586/15]
14. Kim S., Ajami H., Sharma A. (2020). Using remotely sensed information to improve vegetation parameterization in a semi-distributed hydrological model (SMART) for upland catchments in Australia, *Remote Sens.*, 12(18), 3501, [4.848/2]
15. Moradi S., Agostino A., Gandomkar Z., Kim S., Hamilton L., Sharma A., Henderson R., and Leslie G. (2020). Quantifying natural organic matter concentration in water from climatological parameters using different machine learning algorithms, *H2Open Journal*, 3(1), 328–343, [–/4]
16. Kim S., Eghdamirad S., Sharma A., Kim J. H. (2020). Quantification of uncertainty in projections of extreme daily precipitation, *Earth and Space Sci.*, 2020, e2019EA001052–T, [2.900/9]
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❖ **컨퍼런스**

1. Young M., Hayman-Joyce J., Kim S. (2012). Use of Single Layer Concrete Armour Units as Toe Reinforcement, *Coast. Eng. Proc.*, 1 (33), 48, [-/3]

**학술대회 (주발표자)**

1. Kim S., Sharma A., Wasko C., Nathan R. How does total precipitable water link to precipitation extremes?, *MODSIM 2021*, Sydney, Australia
2. Kim S., Zhang R., Sharma A., Lakshmi V. Improvements of satellite observations through data merging: status and challenges, *AGU fall meeting 2020*, San Francisco, CA, USA
3. Kim S., Pham H., Liu Y., Sharma A., Marshall L. Combining geophysical variables for maximizing temporal correlation without reference data, *MODSIM 2019*, Canberra, Australia
4. Kim S.(초청), Guo Y., Wasko C., Sharma A. On soil moisture, rain and flood extremes in a warming climate – using satellite remote sensing to define future antecedent conditions, *KSCC 2018*, Jeju, Republic of Korea
5. Kim S., Ajami H., Sharma A. Incorporating an operational satellite-derived leaf area index into a computationally efficient semi-distributed hydrologic modelling application (SMART), *MODSIM 2017*, Hobart, Australia
6. Kim S., Liu Y., Johnson F., Sharma A. A temporal correlation-based approach for spatial disaggregation of remotely sensed soil moisture, *AGU fall meeting 2016*, San Francisco, CA, USA
7. Kim S., Liu Y., Johnson F., Parinussa R., Sharma A. Reducing Structural Uncertainty in AMSR2 Soil Moisture Using a Model Combination Approach, *AGU fall meeting 2014*, San Francisco, CA, USA
8. Kim S., Liu Y., Johnson F., Parinussa R., Sharma A. Improvement of Soil Moisture Dataset Combining AMSR2 Soil Moisture Products, *OzEWEX 2014*, Canberra, ACT, Australia

**자격증**

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수문학/수자원공학, 인공위성 원격탐사, MATLAB, Python, ArcGIS/QGIS

**연구경력**

- 2017 년 4 월 – 현재 **UNSW Water Research Centre** 박사후 연구원
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**교육경력**

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**학술활동**

- 학술지 리뷰: *Remote Sensing of Environment*, *Journal of Hydrology*, *Environmental Research Letters*, *KSCE Journal of Civil Engineering* 등
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## 참여프로젝트

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  - 2019 년 5 월 - 2020 년 4 월: *A Fourier approach to address low-frequency variability bias in hydrology* ([DP180102737](#)) funded by ARC
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- 박사과정
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  - 2015 년 5 월 - 2015 년 5 월: NASA SMAP 토양습윤 데이터 검증 캠페인 (현장 데이터 측정)/Soil Moisture Active Passive Experiment - the 4<sup>th</sup> campaign ([SMAPEX-4](#))

## 참고인

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