## **SOST Publications 2021**

## **Journal Publications**

- 1. Ashneel Ajay Singh, Anish Anit Maharaj, Havish Naidu, Kushaal Raj, **Dhrishna Charan**, Ravneel Chand, **Sanjay Singh**, **Lionel Joseph**, **Priyatma Singh**, **Ramendra Prasad** (2021) Change Detection of a Coastal Woodland Mangrove Forest in Fiji by Integration of Remote Sensing with Spatial Mapping. *Asian Journal of Conservation Biology*, 10(2), 222-233. Doi: 10.53562/ajcb.66492. **(Q1)**.
- 2. Mohammed Moishin, Ravinesh C Deo, **Ramendra Prasad**, Nawin Raj, Shahab Abdulla (2021) Development of Flood Monitoring Index for daily flood risk evaluation: case studies in Fiji. *Stochastic Environmental Research and Risk Assessment*, 35(7), 1387-1402. Doi: https://doi.org/10.1007/s00477-020-01899-6. (Q1).
- 3. Leal Filho, W., Krishnapillai, M., Sidsaph, H., Nagy, G.J., Luetz, J.M., Dyer, J., Otoara Ha'apio, M., Havea, P.H., Raj, K., **Singh, P.** and Rogers, T., 2021. Climate Change Adaptation on Small Island States: An Assessment of Limits and Constraints. *Journal of Marine Science and Engineering*, 9(6), p.602. (**Q2; SNIP: 1.1590; 53rd percentile**).
- 4. Wolf, F.; Filho, W.L.; **Singh, P.;** Scherle, N.; Reiser, D.; Telesford, J.;Miljkovi´c, I.B.; Havea, P.H.; Li, C.; Surroop, D.; et al. (2021) Influences of Climate Change on Tourism Development in Small Pacific Island States. *Sustainability*, 13, 4223. https://doi.org/10.3390/su13084223 (**Q1; SNIP: 1.242; 84th percentile**)
- 5. **Naaz, Z. T.,** Bibi, R., & Dorey, J. B. (2021). Current status of bees in Fiji; Geographical distribution and role in pollination of crop plants. *Oriental Insects*, 1-27. https://doi.org/10.1080/00305316.2021.1982043 (**SNIP: 0.866; 26th percentile**)
- 6. Mumtaz Ali, **Ramendra Prasad**, Yong Xiang, Mohsin Khan, Aitazaz Ahsan Farooque, Tianrui Zong, Zaher Mundher Yaseen (2021). Variational mode decomposition based random forest model for solar radiation forecasting: New emerging machine learning technology. *Energy Reports*. DOI: https://doi.org/10.1016/j.egyr.2021.09.113 (Q1; Impact Factor: 6.870 and SNIP: 2.350; 62nd percentile).
- 7. Nazila Shamloo, Mohammad Taghi Sattari, Halit Apaydin, Khalil valizadeh Kamran, Ramendra Prasad (2021) Evapotranspiration estimation using SEBAL algorithm integrated with remote sensing and experimental methods. *International Journal of Digital Earth*. DOI: 10.1080/17538947.2021.1962996 (Q1; Impact Factor: 3.985 and SNIP: 1.434; 91st percentile).
- 8. Ashneel Ajay Singh, Anish Maharaj, **Priyatma Singh**, (2021) Benthic Resource Baseline Mapping of Cakaunisasi and Yarawa Reef Ecosystem in the Ba Region of Fiji. *Water* (*Switzerland*). (**O1; 78th percentile**).

- 9. Mohammad Taghi Sattari, Halit Apaydin, Shahab S Band, Amir Mosavi, **Ramendra Prasad** (2021) Comparative analysis of kernel-based versus ANN and deep learning methods in monthly reference evapotranspiration estimation. *Hydrology and Earth System Sciences*. (Q1; 96th percentile)
- 10. Mohanad S. AL-Musaylh, Kadhem Al-Daffaie, **Ramendra Prasad**, (2021) Gas consumption demand forecasting with empirical wavelet transform based machine learning model: A case study, *International Journal of Energy Research*, 1-15. Doi: https://doi.org/10.1002/er.6788. (Q1; 83rd percentile).
- 11. Mohammed Moishin, Ravinesh C Deo, **Ramendra Prasad**, Nawin Raj, Shahab Abdulla (2021) Designing Deep-Based Learning Flood Forecast Model With ConvLSTM Hybrid Algorithm. *IEEE Access*. Vol.9, PP 50982-50993. Doi: 10.1109/ACCESS.2021.3065939. (Q1; SNIP: 1.734; 84th percentile).
- 12. Wolf, F.; Filho, W.L **Priyatma Singh**; Scherle, N.; Reiser, D.; Telesford, J.; Miljkovi´c, I.B.; Havea, P.H.; Li, C.; Surroop, D.; (2021) Influences of Climate Change on Tourism Development in Small Pacific Island States. *Sustainability*, 13, 4223. https://doi.org/10.3390/su13084223
- 13. Halit Apaydin, Mohammad Taghi Sattari, Kambiz Falsafian, **Ramendra Prasad**, (2021) Artificial intelligence modelling integrated with Singular Spectral analysis and Seasonal-Trend decomposition using Loess approaches for streamflow predictions. *Journal of Hydrology*. Doi: https://doi.org/10.1016/j.jhydrol.2021.126506 (**Q1; SNIP: 1.869; 95**th **percentile**).
- 14. Mumtaz Ali, **Ramendra Prasad**, Yong Xiang, Adarsh Sankaran, Ravinesh C Deo, Fuyuan Xiao, Shuyu Zhu. (2021) Advanced extreme learning machines vs. deep learning models for peak wave energy period forecasting: A case study in Queensland, Australia. *Renewable Energy*. Doi: https://doi.org/10.1016/j.renene.2021.06.052 (**Q1; Impact Factor: 5.439 and SNIP: 2.075; 87th percentile**)

## **Chapters in edited Book**

- 1. Ramendra Prasad, Dhrishna Charan, Lionel Joseph, Thong Nguyen-Huy, Ravinesh C. Deo, Sanjay Singh (2021) Daily Flood Forecasts with Intelligent Data Analytic Models: Multivariate Empirical Mode Decomposition-Based Modelling Methods. In: Ravinesh Deo et al., eds. Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation, Springer.
- 2. Sagthitharan Karalasingham, Ravinesh Deo, **Ramendra Prasad** (2021) Short-term electrical energy demand prediction under heat island effects using emotional neural network integrated with genetic algorithm. In: Ravinesh Deo et al., eds. Predictive Modelling for Energy Management and Power Systems Engineering, Elsevier.

3. Thong Nguyen-Huy, Ravinesh C. Deo, Zaher Mundher Yaseen, Ramendra Prasad, Shahbaz Mushtaq (2021) Bayesian Markov Chain Monte Carlo-Based Copulas: Factoring the Role of Large-Scale Climate Indices in Monthly Flood Prediction. In: Ravinesh Deo et al., eds. Intelligent Data Analytics for Decision-Support Systems in Hazard Mitigation, Springer

## **Conference/Workshop Presentations**

- 1. **Ramendra Prasad** and **Lionel Joseph** (2021) Climate Change: Threats and Options for Pacific Small Island Developing States. *International Conference on Environmental Issues-Global Warming: Reasons and Remedies*, 3rd-4th September, 2021, Katol, Nagpur, India (Online Oral Presentation, Keynote Address).
- 2. **Joseph, L**. Deo, R. C. Parisi, A. Soar, J. Raj, N. **Prasad, R**. High-precision wind speed prediction with hybrid deep learning algorithms to overcome intermittency in energy generation: case studies of selected sites in Viti Levu, Fiji. *The Advanced Data Analytics Group Symposium*, 27th April, 2021, Australia (Virtual).
- 3. **Joseph, L**. Deo, R. C. Parisi, A. Soar, J. Raj, N. **Prasad, R**. Bayesian optimized-bidirectional long short-term memory hybrid model integrated with three-stage feature selection for near

real-time wind speed forecasting. *School of Sciences HDR Research Student Symposium*, 6th December, 2021, Australia (Virtual).

4. **Dhrishna Charan** (2021) Climate and Ocean Risk Vulnerability Index: Case of Fiji. Webinar on the Ocean Risk Vulnerability Index for Climate Change Assessment: Cases of Fiji, the Philippines, and Bangladesh. 17th November, 2021.