

Special Issue

Machine Learning (ML) and Deep Learning (DL) Applications in Wildfire Science: Principles, Progress and Prospects (2nd Edition)

Message from the Guest Editors

This SI aims to compile the most recent research & advancements in AI applications within wildfire science. We welcome original research that not only contributes to a better understanding of ML & DL methods among wildfire researchers & managers but also sheds light on the diverse & challenging array of problems in wildfire science. It includes, but is limited to:

Fuels characterization, fire detection & mapping

Fire weather & climate change

Fire occurrence, susceptibility & risk

Fire behavior, effects & management

Mapping fire extent & severity

ML & DL & big data & Integration of AI analytics &

drones in wildfire analysis & management

Wildfire prevention & early warning systems

Remote sensing & satellite imagery in wildfire monitoring

Firefighting strategies & technologies

Fire ecology & ecosystem management

Socioeconomic impacts & community resilience to wildfires

Adaptive management & decision support systems in wildfire response

Fire risk assessment & modeling

Innovative approaches to wildfire suppression & containment

Post-fire rehabilitation & restoration techniques

Multi-agency collaboration & coordination in wildfire management

Wildfire policy, governance & public awareness efforts

Guest Editors

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Deadline for manuscript submissions



Fire

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About the Journal

Message from the Editor-in-Chief

Fire is an international open-access journal about the science, policy, and technology of fires and how they interact with communities and the environment. *Fire* seeks to provide a forum to help the fire science community convey how we can live with fire in a changing world. *Fire* seeks submissions from interdisciplinary studies that take a pyrogeography perspective of fires occurring in natural, cultural, and industrial landscapes and how they interact with communities in the science-policy interface. *Fire's* Editorial Board are widely recognized international leaders. The journal emphasizes quality and innovation and has a rigorous peer-review process. I strongly recommend *Fire* for the rapid publication of your innovative research publications and case studies.

Editor-in-Chief

Dr. Grant Williamson
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