Ministry of Earth Sciences (MoES)  
Government of India  

Call for proposal - AI/ML Applications in Earth Sciences

Ministry of Earth Sciences wishes to promote research on application of Artificial Intelligence and Machine Learning (AI/ML) in the field of earth sciences. MoES is keen to involve scientists/researchers working on AI/ML to develop innovative ideas and strategies to demonstrate innovative solutions for a wide range of problems utilizing the potential of AI/ML. Ministry of Earth Sciences (MoES) invites project proposals from Universities, Research/Academic institutions in the country for funding for focused research in the following areas of possible application of AI and ML techniques:

(a) Post processing of Numerical Weather Prediction (NWP) products  
(b) Monsoon forecasting from sub-seasonal to seasonal time scales  
(c) Urban flooding & Hydro-meteorological applications  
(d) Prediction of extreme events- Heavy Rainfall, Heat Wave, Cold Wave  
(e) Drought Prediction  
(f) Thunderstorm/lightning prediction/nowcasting  
(g) Agro-meteorological applications  
(h) Different sectoral applications (power, tourism, health etc)  
(i) Ocean state forecasts  
(j) Potential Fishing zone advisory applications  
(k) Climate change projections  
(l) Prediction of Fog  
(m) Geosciences and Seismology  
(n) Hydrology  
(o) Big data analytics in model, observed, satellite and reanalysis data  
(p) Any other relevant topic related to Earth System Sciences

MoES will provide

1. Limited computational resources and storage facilities available at MoES will be allocated to the successful proposals.  
2. Data relevant to the project, if available with MoES institutions, will be provided to the PIs free of cost.

AI/ML applications developed by the supported proposals will be transferred to MoES Institutions for real time use/applications before the closure of the project.

The research proposals with the details of investigators and budget may be submitted to the Ministry of Earth Sciences for further consideration.

More details of the format of the proposal and the guidelines are given at http://www.moes.gov.in/content/project-management-system.

The last date for receiving the completed project proposals is 30 April 2020.