

With Artificial Intelligence & Machine Learning - what lies ahead for Earth Surface Modeling ?

A Forum, CSDMS Annual Meeting May 2018

Venue: Room C120 (main auditorium), SEEC Building CU Boulder East Campus, 1030-1230h, 24 May 2018

Convenors: Chris Jenkins, CU Boulder (jenkinsc0@gmail.com) & Jeffrey Obelcz, NRL Stennis (jbobelcz@gmail.com)

Questions for the Forum:

- What can AI and ML currently do that might benefit Earth Surface Dynamics Modeling ?
- What is the relationship between Process Modelling and AI / ML ?
- How should CSDMS Community respond to the advent of AI / ML
- What Earth Surface Dynamics Modeling-related tasks are not suited for AI / ML, if any ?

Draft Agenda:

Prior – Posters and printed materials on display in room

1030-1040: Openings -- Chris + Jeff on the forum motivations

1040-1100: 5-minute lightning talks -- speakers by prior arrangement

- Mary Hill mchill@ku.edu (U Kansas): Why I see AI as so important
- Rachael D. Mueller mueller@esr.org (Earth & Space Research): Antarctica's role in preconditioning natural hazards
- Hui Tang huitang@email.arizona.edu (U Arizona): Post-fire debris flow and flood predictions

1100-1115: Open for remarks from the floor (1 mins each)

1115-1130: Form an AI+ML focus group in CSDMS ? -- Directions, committee composition, activities

1130-1215: Breakout groups (same room) -- for the above questions; digesting the pre-session survey; or on themes like spatial mapping / forward prediction

1215-1230: Reports from the breakout groups, open forum on these remarks (1 mins each)

1230: Closing by Chris + Jeff

Post – Posters and printed materials on display in room

Notes will be taken throughout and made available to the participants.

CJ,JO 22 May 2018