Artificial Intelligence/Machine Learning Post-Doctoral Position
Available at the Center for Western Weather and Water Extremes (CW3E)
Part of UC San Diego's Scripps Institution of Oceanography

Location: La Jolla, CA.
To apply: Please send CV, cover letter and 3 references to Luca Delle Monache (ldellemonache@ucsd.edu)
Deadline: Position is available immediately. Preference will be given to applications received by 10 May 2019, but applicants will be considered until the position is filled.

The Center for Western Weather and Water Extremes, (CW3E; cw3e.ucsd.edu) is a research and applications center established in 2014 at Scripps Institution of Oceanography by its Director, Dr. F. Martin Ralph. CW3E focuses on the physical understanding, observations, weather predictions of extreme weather and water events to support effective policies and practices to improve resilience in the Western U.S. CW3E carries out its goals with a diverse network of research and operational partners at more than ten other institutions across the U.S. Individuals will be joining a group of several existing Postdoctoral scholars and graduate students, and a number of experienced faculty, researchers and staff at Scripps who are involved with CW3E.

CW3E seeks a Postdoctoral researcher with a strong background in artificial intelligence (AI), machine learning, and computational science to develop tools for the prediction of precipitation and atmospheric river-related quantities (e.g., Integrated Water Vapor Transport – IVT) over the Western U.S. and from weather (0-10 days) to subseasonal-to-seasonal (S2S; weeks to months) scales. The successful candidate will develop novel approaches based on AI techniques, possibly in combination with traditional postprocessing techniques, to significantly improve both deterministic and probabilistic predictions based on dynamical models for the quantities and at the spatiotemporal scales mentioned above. In addition to the coding expertise mentioned above, experience with as AI-specific software platforms (Tensorflow, Keras, CNTK, PyTorch, Scikit-Learn, etc.) and working on cloud computing environments (AWS, Azure, etc.) is desirable.

Applicants should have 0-2 years of Postdoctoral experience, or be nearing completion of their Ph.D. (estimated within 3 months), and be self-motivated and hard-working. Good written and verbal communication skills, including the ability to produce scientific publications and presentations and meet project milestones are required. Strong analytical backgrounds with a Ph.D. in hydrology or environmental engineering is preferred. Programming experience working in a Unix environment with experience in scripting languages such as Python, Perl, R and Matlab is highly desired. Successful applicants should be comfortable independently working with large code libraries and databases, utilizing large meteorological data sources, and producing novel visualizations.

Per normal Postdoctoral appointment policies, all positions are envisioned as being initially for 1-year, with extension possible contingent upon performance and availability of funding. The University of California, San Diego is an AA/EOE.