

Postdoctoral Research Hydraulic Engineer Position

Job Description

The Hydrologic Research Center (HRC), San Diego - is a public non-profit research, technology transfer and training organization, dedicated to the development of effective and sustainable solutions to global waters issues. HRC's goal is to provide a conduit for academic and other up-to-date research to be made suitable for effective application to field operational problems that involve water management and flood disaster mitigation. At present HRC operational systems support hydrometeorological forecasters in more than 65 countries, serving about 3 billion people worldwide. Please visit the HRC website for more details: <https://www.HRCwater.org>.

HRC is in search of a postdoctoral research engineer that specializes in computational hydraulics and its applications. As part of the HRC physical modeling team, you will be working with other researchers and computer engineers in the development and implementation of tailored numerical modeling solutions for a variety of channel flow applications in local and international projects. The typical work associated with the position includes numerical modeling and predictions in open channel hydraulics and sediment transport, scalable flash flood modeling, integrated hydraulics structure modeling, watershed management and flood mitigation strategy, quantitative and statistical analysis of model results, and user training of the numerical codes and background theories. The prospective candidate is expected to have a solid research background in hydraulics, hydrology or other related fields. Strong quantitative and scientific computing skills are essential for the position.

Specific Requirements

- PhD degree or above in hydraulics, computational hydraulics and hydrology or allied field with an emphasis on numerical modeling.
- Proven experience in scientific computing in channel routing.
- Proven experience in hydraulics structure modeling and integration, such as: reservoirs, sluice gates, and diverging channels etc.
- Ability to communicate research results with various audiences, including non-technical audiences, in the form of technical reports, training materials, peer reviewed papers and presentations.
- Desired is: experience with teaching and technology transfer.
- Desired is: proficiency with programming languages, such as Fortran, C, Matlab and Bash shell scripting.

Additional Information and Instructions:

HRC's office is located in San Diego, California. We all work remotely and we welcome candidates from across the United States for remote opportunities.

Salary commensurate with qualifications and experience. HRC provides a competitive benefits program including retirement, medical, dental and vision plans and paid vacations, holidays and sick leave.

Candidates should email a cover letter highlighting the reasons for their interest in the position, their current CV, and the names of two references that are familiar with the candidates past work to: Chair, HRC Search Committee: HRCRHE-Search@hrcwater.org. Selected candidates will be provided an application form that must be completed prior to final selection.

The position will remain open until filled.

The Hydrologic Research Center is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, protected veteran status, gender identity or sexual orientation.

In compliance with federal law, all persons hired will be required to verify identity and eligibility to work in the United States and to complete the required employment eligibility verification document Form I-9 upon hire.

Please note that due to the Covid-19 pandemic, HRC team members have not been engaged in professional travel since March 2020; however, the ability to potentially travel domestically and internationally is required.