

Graduate Research Assistant (2 Positions)
The Watershed Hydrology Laboratory
Department of Natural resources and Environmental Management
University of Hawai'i at Manoa.

Duties: Assist the Watershed Hydrology Laboratory Leader in his research program. The research program addresses tropical hydrology using a combination of experimental, theoretical and numerical modeling across a wide range of temporal and spatial scales. The selected student will be part of a team working on the following research projects: i) Development and testing of Precision Vegetative Buffer (VBS) under Hawaii conditions: evaluate their performance in minimizing soil and water degradation in two different Hawaiian watersheds.; ii) evaluate the performance of two hydrological models (a distributed and a semi-distributed version of the Sacramento Soil Moisture Accounting Model, SAC-SMA), for operational flood forecasting.; iii) Modeling current and alternative best management practices on Hanalei watershed using multiple watershed models, e.g., DHSVM, AnnAGNPS; and iv) Improving soil water content monitoring sensors.

Minimum Qualifications: Regular/Potential graduate standing, in NREM or related field of study with strong numerical modeling and/or computing capabilities; course background in programming languages (C++, VBasic, Java, ArcObject); experience in using hydrological models (DHSVM, AnnAGNPS, MODFLOW, Hydrus2D/3D) excellent quantitative background, excellent computer and numerical modeling skills; good skills in spatial-temporal data analysis (GIS & GPS); ability to articulate research objectives and hypotheses; good writing and report preparation skills; ability to work as part of a team.

Desirable Qualifications: Experience in software/program development in hydrology or physical science; ability to develop and maintain homepages; experience in using hydrological models at different scales. Field and laboratory experience. Posses a valid driver license.

Duration: Up to three years and renewable annually pending satisfactory performance and continued availability of funds.

Apply To: Submit 1) a detailed CV; 2) a brief statement describing your credentials to meet the position qualification based on your academic skills and professional experience; and 3) a minimum of three recommendation letters to Dr. Ali Fares, Watershed Hydrology Laboratory, Department of Natural resources and Environmental Management (NREM), 1910 East-West Road, Honolulu, HI 96822.

Inquiries: Dr. Ali Fares, Phone: 808-956-6361; Website: <http://www.ctahr.hawaii.edu/faresa> or email AFares@Hawaii.edu

Closing Date: Continuous recruitment; review of applications will begin on December -26 2008 and will continue until the position is filled.