UNIVERSITY OF HAWAIʻI / RESEARCH OPPORTUNITY 02 / MAUI

Postdoctoral Researcher

Hydrology / Field instrumentation / AI-enabled monitoring

A research job for someone equally comfortable writing Python and wiring a datalogger.

MAUI, HAWAIʻI • 50% MESONET / 50% RESEARCH

This is an unusual blend of rigorous research and real-world field engineering. Spend half your time helping operate the Hawaiʻi Mesonet and half developing new ways to observe streams, water resources, and environmental hazards.

What you'll do

- **50% · Hawaiʻi Mesonet.** Install, maintain, and troubleshoot remote weather stations, sensors, solar power, telecommunications, and Campbell Scientific dataloggers.
- **Make measurements trustworthy.** Improve station programs, investigate data-quality issues, and help solve hardware/software problems in the field.
- **50% · Hydrologic research.** Develop and test AI-assisted hazard monitoring, edge-camera systems, and image-based approaches to stream stage and streamflow.
- **Build new science.** Integrate imagery and hydrologic sensor data, evaluate reliability and uncertainty, write research code, publish findings, and collaborate with partners.

What you bring

- **Research training.** A PhD in hydrology, water resources, environmental or civil engineering, geoscience, atmospheric science, or a closely related technical field.
- **Code + science.** Strong quantitative skills, especially Python/data analysis, plus the curiosity and independence to design and publish research.
- **Real instrumentation skills.** Experience programming or troubleshooting dataloggers and environmental sensors; Campbell Scientific/CRBasic experience is especially valuable.
- **Especially useful.** Computer vision, machine learning, edge computing, cameras, GIS, telemetry, stream gauging, and designing field experiments.

The right fit enjoys remote fieldwork and practical problem-solving as much as computational research. You do not need to arrive an expert in every AI or sensor technology.

Expect meaningful time for research, developing new methods, and publishing results alongside hands-on field instrumentation. Salary, appointment term, and formal requirements are being finalized.

Interested?

Contact Chris Shuler at cshuler@hawaii.edu with a brief introduction, your CV, and a few lines about your research and field instrumentation experience. Formal application details will follow.

Public-facing research-role concept based on the 50/50 staffing plan. Final duties, qualifications, funding, and appointment terms require confirmation before official recruitment.