The **Montana Climate Office** (MCO) within the W.A. Franke College of Forestry and Conservation at the University of Montana is seeking applications for a **Computer Science & Engineering Intern** (CSI) position. This is a part-time contract position under the direct supervision of the MCO's Climate Data Specialist, Colin Brust. The CSI will manage, develop, and use software to maintain a network of weather monitoring stations (the Montana Mesonet) across Montana. The Montana Mesonet is being developed through a US Army Corps of Engineers (USACE) award to the MCO to aid flood and drought predictions across the state. See https://www.drought.gov/drought-research/usace-upper-missouri-river-basin-soil-moisture-and-plains-snow-monitoring-build for more details of the USACE project. The CSI will assist with the deployment of new mesonet stations to the Montana Mesonet database as they come online and will develop and maintain software for the continued improvement and monitoring of the Montana Mesonet.

A Data CSI fulfills the following roles and responsibilities to assure effective operation of the MT Mesonet System:

- Develop, test and document the software used to manage the MT Mesonet network.
- Test and configure electronic components required to install climate monitoring stations within the MT Mesonet System.
- Remotely assist field crews with all technical aspects of the installation of new monitoring stations.
- Verify proper operation of data collection sensors and transmission systems.
- Interact with all members of the Montana Climate Office (MCO) to contribute to the mission of the MCO.
- Interact with MCO partners in appropriate technical and lay-person's terms to support and promote the mission of the MCO.
- Other duties as assigned.

The University of Montana is an Affirmative Action/Equal Opportunity employer and has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of qualified people who would assist the University in demonstrating its five **priorities for action**: Place student success at the center of all we do; drive excellence and innovation in teaching, learning, and research; embody the principle of "mission first, people always"; partner with place; and proudly tell the UM story.

Position Details

- Pay for this position is $18 - $20 per hour, commensurate with qualifications.
- This position will include "on-call" time outside of a regular Monday to Friday 9 to 5 schedule. During on-call hours, you will be responsible for assisting field crews with any technical or software issues that arise with station installation.

Required Qualifications

- Current enrollment in a University of Montana undergraduate or graduate program.
- Proficiency with the Python programming language.
- Ability to “think on your feet” and debug problems that may occur in the software you are working with.
- Demonstrated strong organization and interpersonal skills, and ability to self-manage while maintaining regular communication with supervisors.
- Ability to work collaboratively within MCO’s team-oriented environment and foster a positive, supportive, and enjoyable work environment with all team members.

Preferred Qualifications

- Familiarity with Git version management systems.
- Experience using Docker to build reproducible software.
- Demonstrated competencies in configuring, deploying, operating, and maintaining climate monitoring systems built on and with Campbell Scientific environmental monitoring technology.
- Demonstrated communication skills, written and verbal.

About UM and the Montana Climate Office

In 2006 Governor Schweitzer approved the Montana Climate Office as the official steward of climate information for Montana, with anticipated service to the Governor’s Drought and Water Supply Committee. Across the US, state climate offices and the American Association of State Climatologists provide climate services at the state and local level in partnership with NOAA and other federal agencies, including the Regional Climate Centers (RCC), Regionally Integrated Sciences and Assessments (RISA) program, the National Climatic Data Center (NCDC), the National Weather Service (NWS), and the USDA's Natural Resource Conservation Service (NRCS). State climate offices (SCO) provide a vital and nationally recognized connection between federal climate partners, University scientists and state and local entities. SCOs serve on a variety of federal, state, or local boards, commissions, task forces, and other groups, providing a direct conduit of information and expertise into planning and operations within the state.

Montana Climate Office Mission

- Assimilate, organize, and disseminate climate information from recognized federal, state, and local sources for the benefit of a large and diverse stakeholder community in Montana.
- Be a credible and expert source of information for decision makers that rely on the most current information on climate to make important management and policy decisions.

- Assist stakeholders in interpreting climate information or adapting climate products to their needs for incorporation into the planning process.