NEW MEXICO TECH
SCIENCE • ENGINEERING • RESEARCH UNIVERSITY
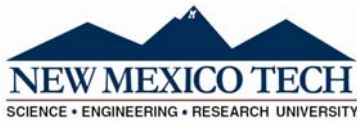
POSITION ANNOUNCEMENT

TITLE: <u>SENIOR SOFTWARE ENGINEER</u>   **DEPT:** <u>MAGDALENA RIDGE OBSERVATORY</u>

REG ☑   **TEMP** ☐   **FULL TIME** ☑   **PART TIME** ☐

STARTING RATE or SALARY RANGE: <u>$72,800-$91,520</u>
Employees being promoted to a higher classified position receive the minimum for the position or a pay rate adjustment of 8% whichever is greater.
INTERNAL POSTING THROUGH: <u>June 6, 2019</u>* CONSIDERATION WILL BE GIVEN FIRST TO TEMPORARY AND REGULAR TECH EMPLOYEES WHO APPLY WITHIN THE 7 DAY INTERNAL POSTING. APPLICATIONS RECEIVED AFTER THE 7 DAY POSTING MARGIN WILL BE CONSIDERED WITH OTHER OUTSIDE APPLICANTS.

JOB DUTIES:
The Magdalena Ridge Observatory (MRO) is located in the Magdalena Mountains in Socorro County, New Mexico. MRO is built and operated by the New Mexico Institute of Mining and Technology (NMT), with offices located on the NMT campus in Socorro, NM. MRO consists of two major facilities, an operational 2.4-meter fast-tracking telescope, and the Magdalena Ridge Observatory Interferometer (MROI), a ten-element optical/infrared interferometer which is under construction. The MROI will be able to image targets up to 100 times fainter than any of them, with up to 200 times more angular resolution than the Hubble Space Telescope.

The Senior Software Engineer will analyze, design, and develop software for a distributed control system and high-speed data acquisition systems using client/server methodologies and object-oriented programming. The person in this position must demonstrate independence, effective problem solving, creativity, and experienced decision-making ability based on developed technical skills. Finally, the Senior Software Engineer will provide MROI staff with significant software engineering experience and have a depth of familiarity with implementation of world-class facility-grade software applications for complex control systems and data acquisitions.

PRIMARY JOB FUNCTIONS:
- Develop codes, test, integrate, and debug software for Java, client/server protocols, Linux, and Real-time Linux.
- Document requirements, design, coding, testing, integration and commissioning activities associated with software.
- Document and report on all activities, progress, and technical status.
- Other duties as required by the MROI Software and Control Systems team lead.

REQUIRED QUALIFICATIONS:
- Bachelor's degree required in Computer Science or related scientific discipline with at least 5 years' design and development experience.
- Experience with C, input/output peripherals, hardware device interfaces and software, hardware, and networks.
- Proven ability to design complicated control software.
- Proven ability to develop software using Java, Linux and associated tools.
- Proven ability to successfully deliver complex software.
- Excellent interpersonal skills to work in a team environment.
- Excellent presentational and written communications skills.
- Demonstrated ability to develop software using C or C++ in real-time environment desired.
- Experience with database design desired.
- Demonstrated ability to work with astronomical applications desired.
- Demonstrated ability to interface with and manage external contracts/ vendors desired.
- Willingness to obtain a valid NM Driver's License required.

Apply to: New Mexico Tech, Human Resources 801 Leroy Pl. Brown Hall Box 099, Socorro, NM 87801-4796