

Posted: June 29, 2023



REVISED 6/29/23
POSITION ANNOUNCEMENT

TITLE: SOFTWARE DEVELOPER (4)

DEPT: ICASA

REG

TEMP

FULL TIME

PART TIME

STARTING RATE or SALARY RANGE \$65,000-\$80,000

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: Concurrent* 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 software developer will be responsible and capable of building out and maintaining large complete systems. This critical role must have a strong technical background, business acumen, strong leadership skills, and people-management skills. Analytical thinking also is very important, as this position often involves problem resolution and process development. The Software Developer will collaborate with mathematicians, research scientists, data scientists, data analysts and engineers (mechanical and electrical) and other team members on the implementation, testing, deployment and ICASA's technology. The Software Developer will support the Institute for Complex Additive Systems Analysis (ICASA), a research division of New Mexico Institute of Mining & Technology (NMIMT) in a full spectrum of software design, development, test and implementation and technology transfer of ICASA's analytical tool-sets to the customer. The Software Developer will provide technical contract support to ICASA's customer base and provide internal support where needed. The candidate will work in an innovative and collaborative environment to address national security challenges through research and development in data science, geospatial science, computer science, complex systems, artificial intelligence, and machine learning.

REQUIRED QUALIFICATIONS:

Bachelor's degree required in computer science, information systems or related field, and 2 years' work experience using software development practices. Master's degree desired. Master in Languages: Java, Python required. Master in programming Frameworks/ Design: Web Interface Frameworks, Junit required. Master in testing and developer Frameworks: JIRA, Github/ Bitbucket, Git, Any IDE required. Proficient in Languages: Bash, C, C++, Javascript/ Typescript desired. Proficient in Programming Frameworks/ Design: Docker/ Kubernetes, Kafka/MQTT desired. Proficient in Testing and Developer Frameworks: Confluence, Bamboo, Artifactory desired. Familiar with Languages: Perl, Scala, Matlab, PHPP, HTML, C# desired. Familiar with Programming Frameworks/ Design: Spark, Hadoop, SQL desired. Familiar with Testing and Developer Frameworks: Linux, Windows, Mac desired. Ability to work both independently and on multidisciplinary teams required. Strong interpersonal and communication skills required. Complex algorithm development experience desired. Background in graph theory, information sciences, linear algebra, differential equations, and geospatial technologies desired. Initiative in both critical thinking, forward thinking, time and commitment to excellence required. Excellent problem solving and trouble shooting skills with respect to complicated interdependent projects required. Time management skills applied to managing a small team and working on individual projects required. Ability to manage and deploy complex systems (often composed of many individual components) required. Must be a U.S. citizen. Must be eligible to obtain and maintain up to a TS/ SCI security clearance.

This position supports the Playas Electronic Attack and Cyber Environment (PEACE) program mission to provide suitable systems and/or technical, analytical, and support services necessary for Service and Joint information warfare activities, providing advanced technology solutions for training, experimentation, exercise, and rehearsal purposes. To support critical experimentation and training events, the Cyber/Electronic Warfare (EW)-kinetic laboratory and testing environment requires understanding cyber-connected devices interacting with the physical environment found in manufacturing automation, utilities and transportation. Understanding these interactions will enable commanders to induce kinetic effects through cyber or vice versa and provide Department of Defense (DOD) with methods to help civilian authorities better protect domestic infrastructure such as dams, electric power grid and airports as well as help planning to improve the resilience of deployed bases. In addition, the cyber/EW-kinetic environment provides the opportunity to provide quick reaction testing to emerging cyber/EW threats for R&D and operations. The PEACE program is managed and executed within the Institute for Complex Additive Systems Analysis (ICASA), a research division of New Mexico Institute of Mining and Technology (NMT).

Apply to: New Mexico Tech, Human Resources 801 Leroy Pl. Brown Hall Box 183, Socorro, NM 87801-4796