

REVISED 1/28/20 POSITION ANNOUNCEMENT

TITLE: RESEARCH SCIENTIST I (2)

DEPT: <u>ICASA</u>

REG ☑ TEMP □ FULL TIME ☑ PART TIME □

STARTING RATE or SALARY RANGE <u>\$65,000-\$75,000</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: January 22, 2020* 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:

Conduct research in complex systems analysis, and in particular, contribute to the analytic process under development by ICASA. Develop tools and techniques that support the modeling, simulation, and analysis of variety of critical-infrastructure, public-safety, and related complex systems. Work in teams with peer and student researchers to develop theoretical and applied solutions to problems of interest.

REQUIRED QUALIFICATIONS:

Bachelor's degree required area of study Mathematics, Computer Science or closely related field. Experience in the modeling, simulation, and/or analysis of large-scale critical infrastructure systems, such as computer networks, electric-power grids, semantic-information networks required. Experience in the analysis of large-scale data sets, to include processing, hypothesis development, discovery, analysis (quantitative/qualitative), and results presentation required. Experience in the development of scientific software projects including prototypes and semi-production systems, as well as experience in performing requirements analysis, design, implementation, and testing required. Proficiency in a modern programming language (e.g., C, C++, Java, Python, etc.) required. Outstanding communication skills, including paradigms such as machine learning, artificial intelligence, hybrid-dynamical system, agent-based modeling, numerical methods, etc. desired. Experience with database systems and data-interface technologies desired. Experience with multi-user revision control systems (e.g. Git, Subversion) desired. Experience in the design and execution of scientific experiments supporting a large-scale and iterative research objective desired. Must be a U.S. Citizen. Must be eligible and willing to obtain a DOD Top Secret/SCI security clearance.