STANDARD LABOR CATEGORIES DESCRIPTIONS/QUALIFICATIONS

FOR

AMES RESEARCH CENTER (ARC)

INTELLIGENT SYSTEMS RESEARCH AND DEVELOPMENT SUPPORT
(ISRDS)-3

July 10, 2018

80ARC018R0012
Senior Technical Writer
The individual is responsible for leading the development and/or editing of content for publications, conference and workshop presentations, and project and Division web sites. Requires a bachelor's degree in a related area and at least 5 years of experience in the field or in a related area. Familiar with a variety of concepts, practices, tools and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May direct and lead the work of others. Typically reports to a project manager or head of a unit/department. A wide degree of creativity and latitude is expected.

Systems Analyst II
An individual with broad experience in the computer and networking field including Operating Systems, Networking, Security, and Applications Analysis. A typical requirement for this skill level is: a Bachelor of Science (BS) degree and at least three years of related work experience. Controls user access and passwords. Proposes and implements system enhancements that will improve the reliability and performance of the system. Monitors system usage and performance.

Systems Analyst III
An individual with broad experience in the computer and networking field including Operating Systems, Networking, Security, and Applications Analysis. A typical requirement for this skill level is: a BS degree and five or more years of related work experience. The individual is responsible for the installation, maintenance, and upgrade of computer hardware and software. Controls user access and passwords. Proposes and implements system enhancements that will improve the reliability and performance of the system. Monitors system usage and performance.

Senior Systems Analyst IV
An individual with broad experience in the computer and networking field including Operating Systems, Networking, Security, and Applications Analysis. A typical requirement for this skill level is: a BS degree from an accredited institution of higher learning in a technology field plus at least five years of related work experience. An individual at this skill level shall have experience in mentoring and leading others in small team environments.

Senior Systems Analyst V
An individual with broad experience in the computer and networking field including Operating Systems, Networking, Security, and Applications Analysis. A typical requirement for this skill level is: a Master of Science (MS) degree plus at least five years of related work experience. An individual at this skill level shall have experience in mentoring and leading others in small team environments.

Systems Integrator II
An individual with experience in the computer and networking field including basic knowledge of operating systems and networking. A typical requirement for this skill level
is two or more years of related work experience. The individual is responsible for integration and deployment of research computing systems.

**Systems Integrator III**
An individual with experience in the computer and networking field including basic knowledge of operating systems and networking. A typical requirement for this skill level is five or more years of related work experience. The individual is responsible for integration and deployment of research computing systems.

**Senior Systems Integrator IV**
An individual with experience in the computer and networking field including in-depth knowledge of two or more operating systems and the necessary networking and security knowledge to support those operating systems. A typical requirement for this skill level is: an Associate of Science (AS) degree and three or more years of related work experience. The individual is primarily responsible for the integration and deployment of research computing systems.

**Senior Systems Integrator V**
An individual with experience in the computer and networking field including in-depth knowledge of two or more operating systems and the necessary networking and security knowledge to support those operating systems. A typical requirement for this skill level is: an AS degree and five or more years of related work experience. The individual is primarily responsible for the integration and deployment of research computing systems.

**Systems/Research/Software Engineer I**
A system developer, research scientist, or software engineer with a moderate research/development/engineering reputation in his/her field. A typical requirement for this skill level is a BS degree from an accredited institution of higher learning in the appropriate scientific or engineering field. An individual at this skill level should have demonstrated his/her problem solving ability in the appropriate area of expertise with several technical publications and several formal technical presentations.

**Systems/Research/Software Engineer II**
A system developer, research scientist, or software engineer with a moderate research/development/engineering reputation in his/her field. A typical requirement for this skill level is a BS degree from an accredited institution of higher learning in the appropriate scientific or engineering field with three years of related work experience; or an MS degree with at least two years of related work experience. An individual at this skill level should have demonstrated his/her problem solving ability in the appropriate area of expertise with several technical publications and several formal technical presentations.

**Systems/Research/Software Engineer III**
A system developer, research scientist, or software engineer with a moderate research/development/engineering reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the
appropriate scientific or engineering field; or an MS degree plus at least three years of related work experience; or a BS degree plus at least five years related work experience. An individual at this skill level should have demonstrated his/her problem solving ability in the appropriate area of expertise with several technical publications and several formal technical presentations.

Senior Systems/Research/Software Engineer IV
A system developer, research scientist, or software engineer with a distinguished research/development/engineering reputation in his/her field. A typical requirement for this skill level is a MS degree from an accredited institution of higher learning in the appropriate scientific or engineering field plus at least six years of related work experience; or a BS degree plus at least eight years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have experience in mentoring and leading others in small team environments.

Senior Systems/Research/Software Engineer V
A system developer, research scientist, or software engineer with a distinguished research/development/engineering reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the appropriate scientific or engineering field plus at least three years of related work experience; or an MS degree plus at least six years related work experience; or a BS degree plus at least eight years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have experience in mentoring and leading others in small team environments.

Computer Scientist II
A computer science researcher with a moderate research/development reputation in his/her field. A typical requirement for this skill level is a BS degree from an accredited institution of higher learning in the appropriate computer science field plus at least three years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with several technical publications and several formal technical presentations.

Computer Scientist III
A computer science researcher with a moderate research/development reputation in his/her field. A typical requirement for this skill level is a MS degree plus at least two years of related work; or a BS degree plus at least five years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with several technical publications and several formal technical presentations.

Senior Computer Scientist IV
A computer science researcher with a distinguished research/development reputation in
his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the appropriate computer science field; or an MS degree plus at least four years related work experience; or a BS degree plus at least six years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have some experience in mentoring and leading others in small team environments.

**Senior Computer Scientist V**
A computer science researcher with a distinguished research/development reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the appropriate computer science field plus at least three years of related work experience; or an MS degree plus at least six years related work experience; or a BS degree plus at least eight years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have some experience in mentoring and leading others in small team environments.

**Physicist II**
A research physicist or physical scientist with an emerging research reputation in his/her field. A typical requirement for this skill level is an MS degree plus at least two years related work experience; or a BS degree plus at least three years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with technical publications and formal technical presentations. Individuals in this category will have demonstrated the ability to work with abstract concepts and use a solid physics-based approach to formulate physical models and apply them to current chemical, mechanical and/or engineering applications.

**Physicist III**
A research physicist or physical scientist with an emerging research reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the appropriate scientific field: physics, applied mathematics, applied physics, engineering physics or physical chemistry; or an MS degree plus at least three years related work experience; or a BS degree plus at least five years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with technical publications and formal technical presentations. Individuals in this category will have demonstrated the ability to work with abstract concepts and use a solid physics-based approach to formulate physical models and apply them to current chemical, mechanical and/or engineering applications.

**Senior Physicist IV**
A research physicist or physical scientist with a distinguished research reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an
accredited institution of higher learning in the appropriate scientific field: physics, applied mathematics, applied physics, engineering physics or physical chemistry, plus at least one year of related work experience; or an MS degree plus at least four years related work experience; or a BS degree plus at least six years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have experience in mentoring and leading others in small team environments. Individuals in this category will have demonstrated the ability to work with abstract concepts and use a solid physics-based approach to formulate physical models and apply them to current chemical, mechanical and/or engineering applications.

**Senior Physicist V**

A research physicist or physical scientist with a distinguished research reputation in his/her field. A typical requirement for this skill level is a Ph.D. degree from an accredited institution of higher learning in the appropriate scientific field: physics, applied mathematics, applied physics, engineering physics or physical chemistry, plus at least three years of related work experience; or an MS degree plus at least six years related work experience; or a BS degree plus at least eight years related work experience. An individual at this skill level shall have demonstrated his/her problem solving ability in the appropriate area of expertise with numerous technical publications and formal technical presentations, and shall have experience in mentoring and leading others in small team environments. Individuals in this category will have demonstrated the ability to work with abstract concepts and use a solid physics-based approach to formulate physical models and apply them to current chemical, mechanical and/or engineering applications.