15-01270 RESEARCH ENGINEER - SR. RESEARCH ENGINEER - SPACE AVIONICS - WORK LOCATIONS: SAN ANTONIO OR AUSTIN, TEXAS

Lead the full lifecycle design for FPGAs and ASICs in high reliability systems for space applications; define requirements, write specifications, lead development, perform analysis and implement designs from concept to verification in hardware; lead and work with team of engineers, interface with customers, and compile and present PowerPoint slides to justify design. Responsible for design, test, and delivery of comprehensive solutions; complete worst timing analysis and support of other analysis necessary to justify system performance over intended lifespan and in expected environment. Requires a BS or MS degree in Electrical Engineering or Computer Engineering with at least a 3.0 GPA and 3 – 12 years of experience.   Must possess solid design skills associated with FPGA and ASIC solutions, with experience in verification and validation of designs; must have strong electronics test and debugging skills; requires strong verbal and written communication, as well as, presentation skills. Proficiency in design tools, simulation tools, signal routing and management, and worst-case timing analysis preferred. A valid/clear driver's license is required. Work locations in San Antonio or Austin, Texas. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.   Applicant must be a U.S. citizen.   To apply, please go to www.swri.jobs.**

15-01326 SR. COMPUTER SCIENTIST - SR. RESEARCH ENGINEER - EMBEDDED SOFTWARE - AUSTIN, TEXAS

Design and develop high-reliability embedded systems software for a variety of spacecraft control avionics, ADCS systems, and power control subsystems. Perform all phases of the system lifecycle including applied research, requirements generation, design, implementation, testing, integration, installation, and documentation. Interact and interface with clients including developing technical presentations. Field support may require travel to customer facilities. Requires a BS degree in Electrical Engineering, Aerospace Engineering, Computer Science or related field with at least 7 years of experience. Must have at least a 3.0 GPA. Direct experience designing software for high reliability embedded systems is required. Must be an embedded systems designer/developer with strong software skills and networking/socket programming. An interest and/or experience in working with hardware a plus. Excellent verbal and written communication skills required. Must be able to work independently and in project team environments. Must have strong organizational skills and attention to detail. Must have an aptitude for continuous learning and leadership potential. Must be proficient in C/C++ and LabView. Familiarity with VxWorks, Linux, or RTEMS OS for embedded systems is a plus.   Direct space flight design experience a plus. A valid/clear driver's license is required. **Work assignment is in Austin, Texas. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.   Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

15-01451 LEAD ENGINEER - SPACE AVIONICS

Join our Space Avionics Department to build electronic designs for a wide range of space applications.   Develop complex architectures for space systems including; spacecraft avionics, data storage, payload interfaces, and on-orbit processing. Lead teams of analysts, engineers and technologists through the successful completion of research, development, fabrication, test and support projects. Work closely with clients to analyze technology, resource needs and market demand to promote specific projects or develop new business areas. Collaborate with peers at SwRI to achieve strategic goals, including the targeting of internal research and development funding – and support business development for both government and commercial clients. Establish detailed plans for, take full ownership of realizing project technical, financial, and schedule requirements. Requires a BS, MS, or PhD degree in Electrical Engineering, Computer Engineering, or related engineering field. Must have at least a 3.0 GPA. Must have at least 8 years of experience related to the technical and leadership aspects of planning and overseeing develop of complex space systems. Experience in system engineering and leading new initiatives is required. Technical, programmatic, and staff leadership experience, preferably in the areas of space electronics R&D and/or development is required. Experience leading high-performance teams is required. Must commit to continuous professional development and have superb communication skills to lead others. Experience designing electronics, firmware, and/or software for high reliability systems is preferred. Must be able to review and assess work product from team members. Must demonstrate knowledge of the problems faced by the space electronics industry such that they can identify the challenges and develop opportunities to support customers. Proficiency in the use of MS Office products is required. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.   Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

15-01460 SR. RESEARCH ENGINEER - SPACE AVIONICS - AUSTIN, TEXAS

Join our Austin Space Science and Engineering team! Provide support to engineering design teams in selecting, evaluating and documenting compliance to specification of electrical, electronic, electromechanical and electro-optical

parts. Make recommendations regarding appropriate components, researching and suggesting alternatives, and documenting decisions, with minimal direction. You will be responsible for procurement management of all EEE parts. Collaborate with electrical design engineers to help them select appropriate parts given project requirements, schedule and cost limitations. Conduct presentations to customers and clearly communicate with design team member. Must develop an understanding of component lead times, design fluidity, and how that impacts project deliverables in order to manage procurements related to EEE parts. Applications will include military and space products. Requires a BS degree in Electrical Engineering or closely related engineering degree with 5-8 years of engineering experience; 3 of which must be as a Parts Engineer. Working knowledge of NASA EEE-INST-002 preferred. Working knowledge of EEE parts TORs a benefit. EEE parts Procurement management experience is required. Must have at least a 3.0 GPA. Strong communication skills are required. Knowledge of electronic components and basic electronics design is preferred. Must be able to collaborate in a team environment and have initiative to handle projects autonomously. Background in statistical process control a plus. Background in electronics component manufacturering a plus. Must be willing to travel. A valid/clear driver's license is required. **Work assignment is in Austin, Texas. Must be a U.S. citizen or Permanent Resident due to ITAR work in section. To apply, please go to www.swri.jobs.**

15-01463 LEAD COMPUTER SCIENTIST - LEAD ENGINEER - PRINCIPAL ENGINEER - SPACE AVIONICS

Lead, design, develop, and verify mission, spacecraft and instrument flight software for a variety of space applications applying sound software engineering disciplines and practices. Perform and direct all phases of the system lifecycle including proposal development, applied research, requirements generation, design, implementation, testing, integration, installation, and documentation. Perform software project management functions including project planning, cost and schedule development, progress tracking against plans, programmatic and technical reviews, etc. Support related systems engineering activities and maintain relationships with other technical disciplines and project functional areas. Interact and interface with clients including developing technical presentations. Travel to client and team organization facilities is required and varies by project. Experienced software developer for high reliability embedded systems for a variety of next generation space applications. Must be an embedded systems software designer/developer, have experience with real time operating systems, and be familiar with design of real-time systems.Proficiency in C/C++ for embedded systems, including algorithm and data structure design required. Applicant should have experience with networking/socket programming and Python, as well as, familiarity with VxWorks, embedded Linux, RTEMS OS for embedded systems.Interest and/or experience in working with hardware and direct space flight design experience a plus. Position requires excellent verbal and written communication skills; ability to work independently and in project team environments; good organizational skills and attention to detail. Applicant should have aptitude for continuous learning and leadership potential. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01001 RESEARCH COMPUTER SCIENTIST - RESEARCH ENGINEER - SR. COMPUTER SCIENTIST - SIGNAL PROCESSING

Join the exciting new area of developing the avionics applications and next generation of cyber threat detection capabilities for airborne platforms. Collaborate in a dynamic team environment, analyzing, designing, developing, testing and fielding software for various types of aircraft. Responsibilities and activities include participating in software development tasks primarily utilizing C/C++. The target platform will be high performance, fault tolerant applications on embedded platforms. Participating in requirements analysis and development, developing and reviewing software design, implementation, unit testing, integration, installation and maintenance. Leading software development tasks and teams. Developing new ideas and solve complex problems based on technical and domain experience. Collaborate with the team and work independently. Work at SwRI laboratories and short-term travel to government facilities / military bases or other customer facilities. Prepare technical documents and support proposal preparations as required. Requires a BS or MS degree in Computer Science or Computer Engineering (with a focus in Computer Science) with 2-7 years of experience. Must have at least a 3.0 GPA. Must have experience in software development with emphasis on application development utilizing C/C++. Must have working knowledge of software development processes including an ability to analyze and translate requirements into an application design, implementation, unit and integration testing; software/hardware integration and software documentation. Must have experience in embedded real-time RTOS application development as well as cyber detection. Experience with VxWorks RTOS environments, and cyber threat detection application development are highly desirable. Experience developing with Python or Java as well as experience with avionics applications is a strong plus. Excellent technical verbal and written communications skills are critical. A demonstrated track record filling software lead role with increasing responsibility in the areas of design, task planning, and delegation are highly desirable. Current DoD security clearance is highly desired. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility**

requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.

16-01059 LEAD ENGINEER - PRINCIPAL ENGINEER - AIRCRAFT AVIONICS

Join our Defense and Intelligence Solutions Division's Aircraft Avionics Sustainment team. This opportunity is for an experienced avionics MIL-SPEC power supply design engineer to collaborate directly with a cross-functional team developing AC and DC power supplies for embedded avionics flight applications, large RF and pulse power applications, support space and ground vehicle applications, as well as ground support flight electronic hardware for test.   Operate in a team environment as well as independently to complete assigned tasks without direct supervision. Work on multiple tasks in parallel; this may require additional hours to meet project schedules. Responsibilities include requirements development and validation, schematic capture, SPICE simulations, hardware design, board layout support, and lab testing and integration oversight. Requires a BS degree in Electrical Engineering or Computer Engineering with at least 10-15 years of experience in an engineering development environment for embedded avionics designs. Must have at least a 3.0 GPA, MS or Ph.D preferred. Must have at least a 3.0 GPA. Requires strong background of MIL-STD-704 and MIL-STD-461 design experience.   Analog and power electronic design / development / test experience strongly desired. Familiarity with configuration management tools is preferred.   Familiarity with Model Based design using MATLAB/SIMULINK preferred.   Experience in DSP/FPGA hardware and software development is desirable. A working knowledge of Mentor suites like DxDesigner, PADS standard plus, PADS PRO, configuration management methods, and electronic development methods is preferred. An understanding of signal Integrity as well as a good mechanical and environmental aptitude is desired. Prior knowledge of IPC standards, Power (High & Low Voltage), digital, mixed signal, and RF electronics printed circuit board design is a plus. Must be able to demonstrate strong knowledge and experience with switch mode power supplies and the various power supply topologies. Strong experience in analog and digital power supply design and testing, parts selection and derating, as well military standards is required.   Requires excellent interpersonal skills. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01062 ENGINEER - RESEARCH ENGINEER - AIRCRAFT AVIONICS SUSTAINMENT

Participate in embedded software and hardware development teams involved in developing requirements, designing, implementing, testing, and documenting embedded software/hardware applications focusing primarily in C++ and digital/analog designs. Perform embedded hardware design, development, prototyping, integration, and testing against customer requirements.   Perform embedded software design, development, coding, integration, testing, research, programming and documentation for software systems, applications and/or Real-Time Operating Systems in conjunction with hardware design team; develop designs using UML Object Oriented design techniques. Experience in DSP/FPGA hardware and software development is desirable. Develop technical documentation and reports based on software and hardware investigations. Perform laboratory, field test and troubleshooting.   Interact directly with technical customer to more fully understand requirements and constraints of the task objectives. Requires a BS degree in Electrical Engineering or Computer Engineering. Must have at least a 3.0 GPA. Requires 0-5 years of experience. 1 year in Embedded software design, development, and test experience is preferred. Familiarity with configuration management tools such as AccuRev along with Software Modeling is preferred.   Familiarity with Model Based design using MATLAB/SIMULINK and Rhapsody preferred. Requires excellent interpersonal skills.   Experience in DSP/FPGA hardware and software development is desirable. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01063 ENGINEER - RESEARCH ENGINEER - EMBEDDED HARDWARE/SOFTWARE - WARNER ROBINS, GEORGIA

Join our Defense and Intelligence Solutions Georgia Team! The teams is involved in embedded software and hardware development, developing requirements, designing, implementing, testing, and documenting embedded applications focusing primarily in C++ and digital/analog designs. Perform embedded hardware design, development, prototyping, integration, and testing against customer requirements.   Develop designs using UML Object Oriented design techniques. Develop technical documentation and reports based on software and hardware investigations.   Perform laboratory, field tests, and troubleshooting.   Interact directly with technical customer to more fully understand requirements and constraints of the task objectives. Requires a BS degree in Electrical or Computer Engineering. Must have at least a 3.0 GPA with 0-5 years of experience.   1 year of experience in C/C++ as well as testing for both embedded hardware (FPGAs) and software (C/C++), experience in digital design, electronics and circuit design/test is preferred. Embedded

design, development, and test experience strongly desired. Experience in DSP/FPGA development is desirable. Familiarity with configuration management tools such as AccuRev along with Software Modeling is preferred. Familiarity with Model Based design using MATLAB/SIMULINK and Rhapsody preferred. Requires excellent interpersonal skills. A valid/clear driver's license is required. **Work assignment is in Warner Robins, Georgia. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01064 LEAD ENGINEER - SR. RESEARCH ENGINEER - AEROSPACE SYSTEMS ENGINEERING - OKLAHOMA CITY, OKLAHOMA

Solve aerospace/avionics problems with software designs, development ,documentation, integration, and testing. Design, develop, and perform lead software engineering duties in the development of mechanical and electrical systems for Aerospace applications. Lead a group of engineers to accomplish project goals. Prepare technical documentation. Present and pursue ideas for internal research and development. Participate in new business development activities including identification of new business opportunities, proposal writing, budget estimating, and customer presentations. Requires experience in design and test in the Aerospace Industry. Be responsive to dynamic business and market conditions. Execute project management responsibilities and interfacing with clients is an element to this position. Support proposal development and design presentations to clients required including but not limited to some marketing/business development to support department requirements. Requires a BS degree in Computer Engineer, Electrical Engineering or related Engineering degree with software development experience. Knowledge and experience with DoD/USAF programs preferred. Must have at least a 3.0 GPA. Must have at least 6 years of experience in development and maintenance of complex software and data systems, and developing and deploying software applications/tools, firmware, and Real Time Operating Systems. Leadership experience in project management and cost/schedule/performance issues a plus. Must have experience providing guidance to junior engineers, being a technical lead on engineering projects, and working with dynamic project schedules. Requires excellent interpersonal skills with a desire to collaborate and succeed in a team environment. Position demands teamwork, flexibility, innovation, and responsiveness to dynamic engineering teams. A valid/clear driver's license is required. **Work assignment is in Oklahoma City, Oklahoma. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01065 ENGINEER - RESEARCH ENGINEER - AIRCRAFT AVIONICS SUSTAINMENT

Participate in embedded software and hardware development teams involved in developing requirements, designing, implementing, testing, and documenting embedded software/hardware applications focusing primarily in C/C++. Perform embedded design, development, prototyping, integration, and testing against customer requirements. Perform embedded software design, development, coding, integration, testing, research, programming and documentation for software systems, applications and/or Real-Time Operating Systems in conjunction with hardware design team. Develop designs using UML Object Oriented design techniques. Develop technical documentation and reports based on software and hardware investigations. Perform laboratory, field test, and troubleshooting. Interact directly with technical customer to more fully understand requirements and constraints of the task objectives. Requires a BS degree in Computer Engineering and Electrical Engineering. Must have at least a 3.0 GPA. Requires 0-5 years of experience. Embedded software, firmware design, development, and test experience is strongly desired. Familiarity with configuration management tools such as AccuRev along with Software Modeling is preferred. 1 year of experience in C/C++ as well software and hardware testing for both embedded software (C/C++) and hardware (FPGAs), and testing is preferred. Familiarity with Model Based System Engineering design using Enterprise Architecture preferred. Requires excellent interpersonal skills. Experience in software and hardware development is desirable. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01067 LEAD ENGINEER - SR. RESEARCH ENGINEER - SYSTEMS ARCHITECT - WARNER ROBINS, GEORGIA

Join our Defense and Intelligence Solutions to serve as a Systems Architect responsible for overall avionics architecture definition and overall avionics systems engineering technical leadership for Avionics and Support Systems Department programs. You will meet and understand internal and external customers/stakeholders and their technical disciplines. Capture and understand current-state architectures (processes/systems/data/roles). Capture, infer and understand needs/requests /requirements/objectives. Collaborate directly with customer and internal stakeholders to collaboratively, define the solution space and lead trade analyses within and across the relevant domains. Engineer/develop future-state

conceptual architectures that are implementable, secure, scalable and supportable. Decompose those conceptual architectures into functions that can be allocated to processes/systems/data/roles. Lead trade analyses within and across the relevant domains (e.g., scientific, engineering, manufacturing, applications, infrastructure). Work with stakeholders to allocate functions to components/systems; and develop those allocations into requirements for the engineers, designers and managers to design, develop, integrate and test. Requires a BS degree in EE or CE with 7 years as a System Architect or related engineering experience. Must have at least a 3.0 GPA. Must have experience with Open Architecture hardware and software implementations (e.g. OSA, SOSA, MOSA, FACE). Experience presenting at reviews with Customers and/or Senior Leadership is required. Must be successful working in teams and engaging with virtual teams. Experience generating deliverable Systems Engineering documents from the system model is required. Current active secret security clearance preferred. A valid/clear driver's license is required. **Work assignment is in Warner Robins, Georgia. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01068 ENGINEER - RESEARCH ENGINEER - EMBEDDED SYSTEMS
Join our Defense and Intelligence Solutions Division to support multi-disciplinary hardware and firmware development teams involved in developing requirements, designing, implementing, testing, and documenting embedded applications focusing primarily in embedded systems and associated test systems. Perform hardware/firmware design, development, integration, and testing against customer requirements. Perform documentation of requirements, design, and testing of engineering hardware and firmware prototypes and test systems. Perform research and development of embedded systems involving the use of machine learning technologies. Perform laboratory testing, field testing and troubleshooting. Interact directly with project team, project management and technical customer to fully understand requirements and constraints of the task objectives. Requires a BS degree in Electrical Engineering or Computer Engineering. Must have at least a 3.0 GPA. 1 year of experience in firmware (C, C++, Visual Basic, ADA, VHDL, etc.), power supply design, electronics schematic and PCB/PWB layout design is preferred. Must have knowledge or experience in embedded hardware, firmware design, development, or test experience. Analog and/or digital design experience is preferred. Must have excellent interpersonal skills. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01069 LEAD ENGINEER - SR. RESEARCH ENGINEER - SYSTEM ARCHITECTURE - WARNER ROBINS, GEORGIA
Join our Warner Robins, Georgia team! Your responsibilities will span the technology development lifecycle, including requirements generation, system design and implementation, and integration and flight test. These responsibilities may also span the avionics services, to include ground station development as well as mission systems software technologies. Integration activities will include a multitude of host systems, such as live assets of varying capability and structure, simulated systems, and laboratory environments that include constructive simulations, physical hardware, and system simulations. As a member of a high-performing multi-site team you will frequently be interfacing with clients, inter-organizational and outside customer interactions. The ability to travel on occasion for team interaction and integration and test activities is required. Requires a BS degree in EE or CE or closely related engineering degree with at least 7 years of experience. Must have at least a 3.0 GPA. Experience with Java/C++ coding languages, object oriented architectures, and object oriented design is required. Experience with Data Links and Comms, modular Open Mission Systems architectures, integrated development environment including debugger tools, networking, RTOS and PC development, embedded systems integration, requirements generation, and systems interface development is highly desired. In addition, recent work experience with embedded architectures, single board computers, hardware and software in the loop implementation and testing, and Aircraft Mission Systems is desired. Modular Open Mission Systems Development is desired. Experience with requirements generation and system interface development, UML design documentation, XML technologies for configuration and run-time messaging, including schema (XSD) and transforms (XSLT), Object Oriented (OO) Design, Real Time Operating System and PC development (Greenhills, Wind River, Red Hat), Linux Operating System, Configuration Management Systems (e.g. AccuRev), OpenGL, Mil-Std-1553, Embedded software and systems design and integration, Aircraft Software Development, and Mission management software is strongly desired. Current active secret security clearance is preferred. A valid/clear driver's license is required. **Work assignment is in Warner Robins, Georgia. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01071 LEAD ENGINEER - SR. RESEARCH ENGINEER - MECHANICAL SYSTEMS
Solve complex mechanical/aerospace problems with sophisticated conceptual designs, systems modeling, and fabrication of prototype hardware. Design, develop, and perform systems engineering duties in the development/packaging of mechanical and electrical systems for Aerospace applications. Lead a group of engineers to accomplish project goals. Participate in sensor design and packaging, present and pursue ideas for internal research and development, participate in new business development activities including identification of new business opportunities, proposal writing, budget estimating, and customer presentations. Apply your experience with SolidWorks and its premium applications to support thermal and vibration analysis, Mentor Graphics FLOTHERM for Thermal Analysis of Printed Wiring Boards and associated mechanical packaging. Collaborate with leadership and the team and be responsive to dynamic business and market conditions. Requires a BS degree in Mechanical Engineering with at least 7 years. Must have at least a 3.0 GPA. Requires experience in design and test in the Aerospace Industry. Must have experience in integrating complex electrical and mechanical components into functional and/or small-to-large assemblies. Must be proficient with a strong background in design practices, manufacturing, and cost analysis. Relevant experience of mechanical designs required. Leadership experience in project management and cost/schedule/performance issues is strongly desired. Requires excellent interpersonal skills and an aptitude to lead others. Must be innovative and able to succeed in a team environment. Must have experience executing project management responsibilities and interfacing with clients. Experience in integrating complex electrical and mechanical components into functional and/or small-to-large assemblies. In depth working knowledge of electro-mechanical integration. Solid understanding in engineering design principles and industry standards. Experienced and familiar with Mil-Spec components and integration into design. Experience in integrating manufacturability into design. Solid understanding of metal material properties and how it affects thermal design outcome. Proven knowledge and understanding of thermal analysis. Experience in providing solutions to complex thermal problems that exist in Avionic boxes and/or systems. Knowledge and Experience to perform Finite Element Analysis and Integrated Thermal Analysis of systems. Knowledge and experience in GD&T Standards. Experience in analysis of Tolerance design and manufacturing practices. Knowledge and experience in designing components and systems to survive Environmental Testing. Understand of Vibration Analysis, Stress/Fracture analysis. Experience in electro-mechanical systems packaging. Experience in RadHard Design is a plus. Must be able to travel to client sites to integrate and test systems. Must be able to support proposal development and design presentations to clients required including but not limited to some marketing/business development to support department requirements. DoD prior experience desired. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01074 ENGINEER - RESEARCH ENGINEER - EMBEDDED HARDWARE DEVELOPMENT - DAYTON, OHIO
Join our Defense and Intelligence Solutions Division's Ohio office to contribute to the embedded hardware development teams involved in developing requirements, designing, implementing, testing, and documenting embedded hardware applications focusing primarily in C/C++. Perform embedded design, development, prototyping, integration, and testing against customer requirements. Perform embedded design, development, coding, integration, testing, research, programming and documentation for systems, applications and/or Real-Time Operating Systems in conjunction with hardware design team; develop designs using UML Object Oriented design techniques. Develop technical documentation and reports based on investigations. Perform laboratory, field tests, and troubleshooting. Interact directly with technical customer to more fully understand requirements and constraints of the task objectives. Requires a BS degree in Computer Engineering or Electrical Engineering with 0-5 years of experience. Must have at least a 3.0 GPA. 1 year of experience in C/C++ as well as testing for embedded hardware (FPGAs), experience in software, electronics and testing is preferred. Embedded firmware design, development, and/or test experience is strongly desired. Familiarity with configuration management tools such as AccuRev. Familiarity with Model Based System Engineering design using Enterprise Architecture preferred. Requires excellent interpersonal skills. Experience in hardware development is desirable. A valid/clear driver's license is required. **Work assignment is in Dayton, Ohio. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01075 LEAD ENGINEER - SR. RESEARCH ENGINEER - EMBEDDED HARDWARE- DAYTON, OHIO
Join our Defense and Intelligence Solutions Division to lead and participate in embedded hardware development teams involved in developing requirements, designing, implementing, testing, and documenting embedded software/hardware applications focusing primarily in C/C++. Support Junior engineers by providing guidance and leadership in embedded design, development, prototyping, integration, and testing against customer requirements. Perform embedded design, development, coding, integration, testing, research, programming and documentation for software systems, applications and/or Real-Time Operating Systems in conjunction with hardware design team; develop designs using UML Object

Oriented design techniques. Assist junior staff with developing technical documentation and reports based on investigations. Perform laboratory, field tests, and troubleshooting. Interact directly with technical customer to fully understand requirements and constraints of the task objectives. Requires a BS or MS degree in Computer Engineering with at least 7 years of software and hardware testing experience. Must have at least a 3.0 GPA. Embedded firmware design, development, and/or test experience strongly desired. Familiarity with configuration management tools such as AccuRev. Familiarity with Model Based System Engineering design using Enterprise Architecture preferred. Requires excellent interpersonal and communication skills. Experience in software and hardware development is desirable. Advanced experience in software development is desirable.   Experience in embedded real-time RTOS application development preferred. A valid/clear driver's license is required. **Work assignment is in Dayton, Ohio. Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.   Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**

16-01076 PRINCIPAL DESIGNER - STAFF DESIGNER - POWER SUPPLY DESIGNER
Join our Defense and Intelligence Solutions Division as Avionics MIL-SPEC Power Supply Designer; you will collaborate directly with a cross-functional team to develop AC and DC power supplies for embedded avionics flight applications, large RF and pulse power applications, support space and ground vehicle applications, as well as ground support flight electronic hardware for testing. Demonstrate your technical expertise and experience with switch mode power supplies and the various power supply topologies. Operate in a team environment as well as independently to complete assigned tasks without direct supervision; work on multiple tasks in parallel. Position may require additional hours to meet project schedules. Responsibilities include requirements development and validation, schematic capture, SPICE simulations, hardware design, board layout support, and lab testing and integration oversight. Apply your strong background of MIL-STD-704 and MIL-STD-461 design experience to help us meet the Division's objectives. Requires a high school diploma or equivalent with 25 years experience in an engineering design development environment for embedded avionics designs, or a BS in Electrical Engineering or EE-Technology with 5-10 years of directly related power supply design experience. Analog and power electronic design, development, and test experience strongly desired. Familiarity with configuration management tools is preferred. Familiarity with Model Based design using MATLAB/SIMULINK preferred. Requires excellent interpersonal skills. Experience in DSP/FPGA hardware and software development is desirable. A working knowledge of Mentor suites like DxDesigner, PADS standard plus, PADS PRO, configuration management methods, and electronic development methods is preferred. An understanding of signal Integrity as well as a good mechanical and environmental aptitude is desired. Prior knowledge of IPC standards, Power (High & Low Voltage), digital, mixed signal, and RF electronics printed circuit board design a plus. Requires strong experience in analog and digital power supply design and testing, parts selection and derating, as well military standards desired. A valid/clear driver's license is required. **Applicant selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information. Applicant must be a U.S. citizen. To apply, please go to www.swri.jobs.**