James Paterson

Software Engineer - Boeing Company

Wentzville, MO - Email me on Indeed: indeed.com/r/James-Paterson/4f208ea8e846b9dd

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Software Engineer

Boeing Company - St. Louis, MO - February 2015 to Present

Acted as the weapon systems support equipment manager. Worked closely with the weapons and missile systems organization to assure test capability was provided when required. Provided estimates and planning of new work and measured the execution of the development activity performed under aggressive schedule demands. Planned staffing requirements in order to assure test product development commitments could be met. Reported team status to senior management. Led a team of approximately 18 engineers.

Assumed the software lead position for factory support equipment software for direct attack products. Assured that the products met the needs of the customer and were produced affordably and with first time quality. Prepared estimates and execution metrics to track progress to the plan.

Led a multi-discipline Root Cause Corrective Action (RCCA) team to resolve deficiencies in performance of the factory First Time Yield metric. Implemented a fishbone Cause and Effect diagram to identify the variables and align strategy to address complex problems. Established the battle rhythm of the team. Developed agendas and material for focus group and working group meetings to facilitate communication and discussion. Coordinated with chief engineers, management, and subject matter experts (SME) to maximize effectiveness of the team. Continuing to drive investigations and actions to reach required goals.

Supporting various integration activities for Joint Common Test Set (JCTS). This includes servo motor integration for the Harpoon seeker subsystem target board. Developing instrument sanitization sequence for classified processing downgrade.

Software Engineer

Boeing Company - St. Louis, MO - October 2012 to February 2015

Working closely with the Vehicle Management System staff to lead the development of a laptop-based tool for engineering support and design verification of the Unmanned Carrier-Launched Airborne Surveillance and Strike platform (UCLASS). Also leading the development of a customer organizational level (O-level) maintenance support tool based on a common core. Employing the Boeing Agile Software Process (BASP) in this development effort. Requirements definition and management using IBM Rational Dynamic Object Oriented Requirements System (DOORS).

Software Engineer

Boeing Company - St. Louis, MO - May 2010 to October 2012

Software leader for two ground support equipment (GSE) products on the QF-16 program. Developed software for a test station called the Automated System Test Set (ASTS) by tailoring and extending a core test system. This software was developed in Agilent VEE. The purpose of the ASTS is to perform acceptance testing and pre-mission certification testing of the modified aircraft.

The other product, a Portable Flight Line Tester (PFLT), was a laptop computer with 1553 communication capability to support ad hoc aircraft troubleshooting. This product was a Windows 7 application developed in C#.

Developed product plans and metrics to set high expectations and measure the level of completion of each product. Developed and presented material for product life cycle reviews. Took ownership of producing high quality Contract Deliverable Requirements List (CDRL) items conforming to company standard processes, including Software Development Plans, Software Requirement Specifications, Software Design Documents, Software Test Plans, Software Test Descriptions and Software Test Reports. Worked with supplier to assure interface compatibility and supported software integration testing at the supplier's integration facility. Supported integration testing and formal qualification testing (FQT) at the aircraft. Provided guidance and leadership to the development staff. Established strong working relationships with the Air Force customer counterpart. Received excellent Contractor Performance Assessment Ratings (CPAR) for the software development work.

Software Architect

Boeing Company - St. Louis, MO - January 2009 to May 2010

Developing software in C# for an automated test station. Leading the software development team to produce a high power derivative of the RTCASS test station.

Software Architect

Caterpillar, Inc - Peoria, IL - August 2008 to December 2008

Led the development of a Simulink based product for core I/O processing and core Onboard Diagnostics (OBD II).

Software Engineer

Distribution Control Systems Division - St. Louis, MO - July 2006 to May 2008

Developed and maintained software to analyze communication performance of power line communication products.

Sales / Finance Manager

St. Louis, MO - October 2002 to May 2006

New vehicle sales, used vehicle sales, and financial services manager.

Software Engineer

Distribution Control Systems Division - St. Louis, MO - January 1998 to October 2002

Ported an existing design to a different microcontroller family for an outbound modulation unit.

Developed a Windows NT 4.0 service, to manage numerous modems for communication with remote equipment.

Software Engineer

Basler Electric Company - Highland, IL - January 1996 to December 1997

Developed flash memory reprogrammablility feature for a newly developed electric utility protective relay product.

Software Engineer

Distribution Control Systems Division - St. Louis, MO - March 1995 to June 1996

Integrated an asynchronous communication protocol called ADLC into an existing product. Work was performed concurrently with ongoing work at Basler Electric.

Software Engineer

Storz Instrument Company - St. Louis, MO - June 1994 to December 1995

Developed software for an ultrasound pachymeter, a device used to measure corneal thickness.

Software Engineer

Distribution Control Systems Division - St. Louis, MO - January 1995 to June 1995

Developed software on an aggressive schedule for a general purpose industrial controller capable of remote powerline communication.

Software Engineer

McDonnell Douglas - St. Louis, MO - October 1993 to June 1994

Developed initialization shell scripts and instrument driver API for advance cruise missile common weapon control system.

Software Engineer

Crown Equipment Corporation - New Bremen, OH - April 1993 to September 1993

Developed application for closed loop feedback control of a DC electric motor used in a new material handling product.

Software Engineer

Cummins Electronics Company - Columbus, IN - September 1991 to April 1993

Developed real-time embedded software for a prototype engine control module.

Software and Systems Engineer

Honeywell Commercial Flight Systems Group - Phoenix, AZ - February 1991 to September 1991

Designed and implemented software for an embedded weight and balance computer for the MD-11 aircraft.

Senior Software Specialist

McDonnell Douglas - St. Louis, MO - February 1988 to February 1991

Modernized the controller of an automatic test system. Developed software for a tactical aircraft mission planning system. Developed an application to control the dispensing of expendable countermeasures (chaff, flares, etc.) from the AV-8B aircraft.

Software Engineer

Honeywell Commercial Flight Systems Group - Phoenix, AZ - November 1987 to February 1988

Designed, coded, and tested software for an embedded weight and balance computer aboard the Boeing 747-400 aircraft.

Software Engineer

Emerson Electric Company - St. Louis, MO - April 1987 to October 1987

Produced software for a power line communication system for use by electric utilities for load management, time-use surveys, and automatic metering.

System Analyst and Software Engineer

Magnavox Government and Industrial Electronics Company - Fort Wayne, IN - October 1986 to March 1987

Performed functional analysis and design for the system control of a battlefield electronic warfare system.

Guidance Systems Engineer

Goodyear Aerospace Corporation - Akron, OH - November 1984 to October 1986

Developed simulation software for verification of laser radar target recognition algorithms. Implemented executive control software for an embedded real-time target recognition system.

Computer Systems and Software Engineer

McDonnell Douglas - January 1982 to November 1984

Developed software for automatic test equipment (ATE) systems used for acceptance test of cruise missile guidance set electronics.

EDUCATION

Bachelor of Science in Electrical Engineering in Computer Option

Michigan Technological University - Houghton, MI