

Lead Software Engineer Lead Software Engineer Lead Software Engineer Saint Cloud, MN ? Expert in the 'C' programming language including variants such as C++, C#, Java and Javascript ? Extensive experience in real-time embedded systems ? Experience in DO-178B formal software quality standard for aviation software components ? Experienced developer of applications for Microsoft Windows. Developer of many hardware interface systems including operating system drivers, communication systems and real-time embedded applications Computer Systems Technologies .NET, DO-178B, ARINC 429, TCP/IP, HTTP, 802.11b, SMB, RS-232, ROM-based and FLASH-based embedded systems, Touch panel displays Computer Languages: C, C#, C++, Javascript, Objective-C, Java, Visual Basic, Shell Script, HTML, .NET Hardware: IBM PC, Intel x86, i8048/41/51, other Intel processors, Motorola 68000 family and other processors, LGP-30

Work Experience Lead Software Engineer White Oak Engineering - Burnsville, MN 2016 to 2017 Designed software for modular process control device using MQX and Javascript. Principle Software Engineer United Technologies - Burnsville, MN 2006 to 2016 Team member for development of generation II, III, and IV Goodrich SmartProbe(TM) Integrated AirData Probe. ? Member of development team for Rotor Ice Protection System (RIPS) helicopter blade electronic deicing system incorporating three Line Replaceable Units (LRUs) communicating via CAN bus. ? Developer of MS Windows application (C#) to simulate any unit and communicate through Windows CAN bus interface. ? Designer and developer of Universal Simulator for SmartProbe development. Written in C#, simulator allows development of software components in the Windows environment instead of the target hardware. ? Key member of team to develop standards for DO-178B requirements writing and standard work for software development. Software Developer Shadin Avionics - Saint Louis Park, MN 2004 to 2006 Architect of engine data concentrator system (EDCM) for the C-130 cargo plane. This DO-178B, Level-A product incorporated six processors to provide redundant data for nine real-time parameters for each engine. Output was via the ARINC 429 data bus. ? Designed and developed hardware simulator for engine data concentrator running on Microsoft Windows. This C++ DLL provided a simulation of the aircraft engine data to allow debugging of the EDC software. ? Developer of fuel quantity measurement system for A-10

(Warthog) attack aircraft. This measured fourteen capacitance fuel sensors to determine fuel quantity in the aircraft and drove the primary fuel indicator. ? Architect of outside air temperature system (OAT) for the Shadin RVSM-compliant air-data computer. This DO-178B, Level-A product calculated outside air temperature using a Wheatstone bridge as part of a multi-processor redundant system to provide air-data values for the Reduced Vertical Separation Minimums requirements of the FAA. Output was via the ARINC 429 data bus. ? Extensive experience in requirements documents, writing test plans, and verification under the DO-178B standard. Architect XATA Corporation 1985 to 2003 of an embedded system for real-time acquisition and display of vehicle performance data, driver log information, and route dispatching messages for the trucking industry. System includes over 300,000 lines of 'C' code for an Intel x86 processor and includes a proprietary operating system, LCD touch-panel display, and a multi-drop communications network. ? Designer/consultant for Java-based embedded system incorporating 802.11b and satellite RF communications ? Used Java to write web-based simulator for the customer's primary product for feasibility study for a satellite-based data-acquisition and communication system. ? Used Microsoft Visual C++ to implement Windows-based internet communication tool for configuration of vehicle-born embedded computer ? Developed many in-house testing tools using Microsoft Visual C++. Software Consultant Lynx Data Systems, Inc - Burnsville, MN 1983 to 2003 Digi International 1988 to 1988 Developed several I/O communication drivers for the Unix operating system using the C and assembly languages. Control Data Corporation 1987 to 1987 Ported UNIX to defense department computer system Shadin Company, Inc 1983 to 1987 Designed and implemented software for an aircraft fuel management avionics system. Senior Project Engineer Rosemount Inc - Eden Prairie, MN 1977 to 1982 Designed and developed multi-processor Motorola 68000 based system for process control. ? Adapted 'C' compiler from DEC PDP-11 for use with the 68000 microcomputer. ? Designed software for dual-processor ultrasonic flow meter. ? Designed and coded assembler program for i8048 processor. ? Helped install and maintain Unix operating system. ? Implemented multi-processor display system using four M6802 processors. ? Designed and coded assembler for TI960B minicomputer. Research Assistant University of Minnesota -

Minneapolis, MN 1971 to 1977 Developed and implemented IEEE-488 data collection system. ?
Maintained and operated CDC 1700 computer and operating system. Education B.S. in Computer
Science University of Minnesota - Minneapolis, MN 1975 Skills APACHE, LINUX, MICROSOFT
VISUAL STUDIO, VISUAL STUDIO, C/C++, C++, PALM O/S, PVCS, VISUAL SLICKEDIT, SUN,
UNIX, PSOS, GNU, MS-DOS, JAVA, INTERNET EXPLORER, MICROSOFT INTERNET
EXPLORER, MICROSOFT WORD, WORD, MICROSOFT WINDOWS, Git Additional Information
Expert software designer with over 30 years hands-on experience. Able to work as a member of a
team or independently. Capable of handling multiple projects concurrently. Operating Systems:
Microsoft Windows, MQX, pSOS, MS-DOS, Linux, Unix Software Packages: Microsoft Visual
Studio.NET (C/C++), Keil IDE, Keil uVision, Microsoft Assembler, Microsoft SourceSafe, Samba,
Apache, Palm O/S Development Kit, Palm O/S Emulator (POSE), Sun Java Development Kit, GNU
C++ Compiler, Microsoft Word, Microsoft MASM, SSI Link&Locate, PVCS, Visual SlickEdit, Brief,
Microsoft Internet Explorer, many others

Name: Wanda Rogers

Email: wblankenship@example.com

Phone: 001-338-345-0772x9300