

Richard L. Ritter

Computer Engineer – Wireless and Embedded Systems Specialist

Experience	2007 to Present – Securaplane Technologies, Inc. Embedded Software Engineer <ul style="list-style-type: none">• Wrote embedded software for a wireless (Bluetooth) ARM7 application using an IAR IDE, including communication via CAN to the Boeing 787 aircraft.• Implemented BITE (Built-In Test Equipment) and run-time CPU re-flash for an ARINC 615 compatible ODLF (On-Board Data Load Function).	<i>Tucson, AZ</i>
	2006 to 2007 – ARGO Tracker Embedded Software Engineer <ul style="list-style-type: none">• Designed, implemented and tested an embedded boot loader for remote over-the-air upgrades of MSP430 and HCS08 firmware in the field.• Ported existing ZigBee wireless networking firmware from the HCS08 MCU to the ColdFire MCU using the Freescale (Metrowerks) CodeWarrior IDE.• Completed a course on CAN, J1708, J1850, and J1939 protocols.	<i>Tucson, AZ</i>
	2004 to 2006 – Environmental Systems Products Applications Engineer <ul style="list-style-type: none">• Designed, implemented and tested software using VB.Net. Wrote proposals, requirements, design documents, test plans and user's manuals.• Worked directly with customers in the field to solve engineering problems, saved two major projects from likely failure in this manner.• Wrote an ISO-9001 compliant software engineering process for the Remote Sensing Department and trained co-workers in the new process.	<i>Tucson, AZ</i>
	1996 to 2003 – Advanced Digital Systems, Inc. Embedded Systems Engineer <ul style="list-style-type: none">• Designed, implemented and tested embedded control firmware in ANSI C for an Automatic Vehicle Location (AVL) embedded control system w/ IAR IDE.• Worked with analog and digital inputs, digital outputs, Global Positioning System (GPS) and wireless RF packet modem technology to implement vehicle tracking, telemetry and remote control applications.• Designed (with OrCAD) the VLM-2000 embedded microcontroller system (hardware and firmware) to replace an obsolete existing design.• Wrote end-user and back-end GUIs for wide area network computer aided dispatching applications using Visual Basic 6, RS-232, TCP/IP and SQL.• Participated in on-site deployment, customer training and support activities.	<i>Tucson, AZ</i>
Education	1990 to 1996, 2003 to 2004 – University of Arizona Bachelor of Science, Computer Engineering	<i>Tucson, AZ</i>
Licenses	FCC Amateur Radio, Technician Class (KD7YCM)	
Other Experience	1986 to 1989 – U.S. Army Material Handling and Storage Specialist	<i>Active Duty</i>

References available upon request