Roland Hughes

(630) 205-1593 roland@logikalsolutions.com

Summary

Works on 1099 contract basis only. Will not touch AGILE/TDD/SCRUM. Collabera, APEX, IBM, and Kforce reps need not contact.

Location: Herscher, IL 60941

First two decades of career spent mainly on Midrange (DEC/VAX) and Mainframe (IBM) systems developing business class solutions. Mostly using BASIC, COBOL, and PowerHouse. Past decade spent in embedded systems, mostly medical devices using C++, Linux, Qt, and Yocto. Lots of architecture and systems design work.

Author of [The Minimum You Need to Know](#) award winning technical book series.

High Level Skills

Remote Working
Embedded Systems Development
Medical Devices
Distributed Systems
Systems Architect
Application Architect
Medical Device Architect
Business Analyst
Technical Writer (award winning author)
SDLC

Technical Skills

C/C++	Qt
CopperSpice	NanoGUI
SQLite	PostgreSQL
Ubuntu/Linux	Debian packaging
Embedded Linux	Yocto/Bitbake
RPM packaging	Custom ISO creation
Docker	ARM (NXP) IMX8
Git	Mercurial
OpenVMS	COBOL
RDB	Oracle
VAX BASIC	DIBOL
ACMS	IBM MQ Series
Cognos Powerhouse	

Professional Experience

Logikal Solutions, Herscher, IL
C++ OpenSource Coding, March 2022-Present

- Created CsScintilla OpenSource project. A version of Scintilla supporting CopperSpice.
- Created RPM and Debian packaging for CopperSpice as well as a base for soon to be formal LS-CS project.
- Created RedDiamond project based on LS-CS and CsScintilla. Multiple major releases including this one which added Git Gist support along with many other features.

HDA Technology, **Remote**
C++ Medical Device Consultant, October 2021-March 2022

- Medical device architect. Educated first time medical device company about not using Python for calculations in diagnostic device.
- Steered them away from Qt because they couldn't afford it.
- Researched Nuklear, GuiLite, Elements, NanoGUI, and wxWidgets for use in medical device. Chose Elements for the device UI and NanoGUI for board verification after full evaluation.
- Yocto/Bitbake custom image for target deployment.
- Docker container design, architecture, and development for board verification software.
- RS-232 communications and WAV file recording.
- Wrote an immense amount of documentation for junior developers.
- C++ Embedded Linux Toradex (NXP) ARM IMX8M Plus

Logikal Solutions, Herscher, IL
C++ OpenSource Coding, August 2020-October 2021

- Forked Diamond text editor to enhance and experiment with CopperSpice.
- Added EDT keypad navigation, file backups, Artistic Style integration, support for themes, and other nice features.
- Created Debian and RPM packaging scripts as well as packages.

Logikal Solutions, Herscher, IL
Author, August 2019-August 2020

- Completed and released *The Minimum You Need to Know About the Phallus of AGILE*.
- Wrote *The Minimum You need to Know About GUI Emacs*. The book is currently awaiting professional editing.

Ximedica, Plymouth, MN
C++ Qt Consultant, January 2019-August 2019

- Medical device architect – infusion pump for B. Braun. ISO 13485 client.
- Converted QML mock-up to functioning product using C++/Qt for all critical UI components leading back to the actual pump logic.
- Bifrucated UI from actual data and functionality.
- Used Ubuntu and Qt 5.12 commercial. Surround SCM for source management.

Digitas, Chicago, IL
C++ Qt and Debian Packaging Consultant, October 2018-December 2018

- Returned to division of Publicis Groupe to redevelop IPOS. This is an "Explore this computer" retail kiosk application INTEL provides retailers.
- C++ QtWebEngine programming for custom browser used in kiosk. Git used for source management.
- Dynamically customizable Debian package for IPOS as well as a dynamically customizable Ubuntu ISO. This allowed for custom in-store advertisements and marketing.

Logikal Solutions, Herscher, IL
Author, June 2018-October 2018

- Continued writing and obtaining professional editing on *The Minimum You Need to Know About the Phallus of AGILE*.

RADIAN, **Remote**
OpenVMS Consultant, February 2018-June 2018

- Wrote utility to catch OPCOM messages and forward in RFC5424 message format to remote logging service via both secured IP and TLS.
- C programming on OpenVMS. CMS used for source code management.

Logikal Solutions, Herscher, IL
Author, October 2016-February 2018

- Began writing *The Minimum You need to Know About the Phallus of AGILE*. This is a collection of essays on the history of IT as lived by myself and one other spanning from the 1960s to present day. It attempts to explain why things are the way they are. Why Waterfall SDLC is software engineering and AGILE is just the latest catchy name for "hacking on the fly."

[Controltech Corp](#), Bondurant, IA
C++ Qt Consultant, September 2016-October 2016

- C++Qt QML project developing embedded Linux target using commercial Qt 5.4 on iMX6 for a livestock building automation control system. Git used for source code management.
- Ported history tracking and graphing system to SQLite from a fatally designed directory tree of JSON files.
- Rewrote graphing so it performed much quicker and more accurately using threads for database activity.
- Wrote memory monitor so we could track and fix memory leaks. Monitor emitted a low memory signal so application could gracefully shut down and hardware watchdog could restart.
- Updated and created developer Wiki pages.

Logikal Solutions, Herscher, IL
Web development, June 2016-August 2016

- Re-developed and linked all book Web sites into single cohesive look & feel instead of some titles having their own site and others grouped together.
- Actively helped my own titles and other authors with marketing by participating in [Interesting Authors Blog](#).

[The Wittern Group](#), Clive, IA
C++ Qt Consultant, January 2016-May 2016

- Qt 5.5 OpenSource targeting custom embedded Linux on Raspberry Pi using both serial and network communications. Data stored locally in SQLite database.
- Architected changing vending machine from single board to two board design so Raspberry Pi could run the touchscreen user interface and exiting board could run coils, coolers, freezers, etc.

Logikal Solutions, Herscher, IL
Author, September 2015-January 2016

- Converted *The Minimum You Need to Know About Qt and Databases* from eBook to print title.
- Converted *The Minimum You Need to Know About Mono and Qt* from eBook to print title.
- Established Interesting Authors Blog with a group of authors.

[Leo Burnett](#), Chicago, IL
C++ Qt and Debian Packaging Consultant, June 2015-September 2015

- Developed the Linux version of IPOS for a division of [Publicis Groupe](#). This is an "Explore this computer" retail kiosk application INTEL provides retailers.
- C++ QtWebEngine programming for custom browser used in kiosk.
- Dynamically customizable Debian package for IPOS as well as a dynamically customizable Ubuntu ISO. This allowed for custom in-store advertisements and marketing.

Logikal Solutions, Herscher, IL
Author, February 2015-June 2015

- Pursued various writing projects that have yet to become books. Most notable of these was attempted sequel to John Smith – Last Known Survivor of the Microsoft Wars.

Cincinnati Test Systems, **Remote**
C++ Qt Consultant, August 2014-February 2015

- C++ Qt enhancements to Blackbelt Pro pressure and leak test system.
- Linux Mint 13, SQLite, Qt 4.8.x OpenSource, Bitbake on an ARM processor. Both serial and TCP/IP real time communications with significant threading. SVN used for source code management.

Welch Allyn, Beaverton, OR
Qt Consultant, December 2013-August 2014

- C++ Qt touchscreen development for Connex® Spot Monitor patient monitoring device. ISO 1348 certified client. Some locations ISO 9001. Team Foundation Server used for source management.
- Real-time COOA messaging serialized for transmission through central message queue then deserialized by each receiver. Target was running BitBake custom Linux on ARM processor.

Logikal Solutions, Herscher, IL
Author, August 2013-December 2013

- Created *John Smith – Last Known Survivor of the Microsoft Wars* audio and eBook versions.
- Wrote *Lesedi – The Greatest Lie Ever Told*.

Cincinnati Test Systems, Harrison, OH
C++ Qt Consultant, October 2012-July 2013

- Blackbelt Pro pressure and leak testing system. Replaced CAN system with Qt on OpenEmbedded communicating to RTOS via multicast UDP.
- Linux Mint 13, SQLite, Qt 4.8.x OpenSource, Bitbake on ARM processor. Both serial and TCP/IP real-time communications with significant Qt threading and socket communication. SVN used

Various
OpenVMS Consultant, March 1985-October 2012

- Worked as a software consultant, Business Analyst, Business Architect, and Application Architect for various clients.
- Various PC and DEC/VAX clients and employers. LIOCS, Crescent Counties Foundation for Medical care, Navistar, Chicago Stock Exchange, McKee Door, Caremark Homecare, Edgewater Medical, The Pampered Chef, H&R Block. Some I worked at multiple times.
- Technologies included IBM Mainframe COBOL, BAX BASIC, VAX C, GRID PAD pen DOS, RSTS/E, RT-11, and BASIC PLUS II. Zortech, Watcom, and CodeWarrior were some of the PC based C/C++ compilers used.
- Embedded systems with C++ and Qt including encrypting communications.
- ACMS, MQ Series, TOLAS, RDB, CDD, MMS, PL/SQL, Pro*C, DIBOL, and Synergy/DE were also used at larger client sites.
- LIOCS Perspective series ERP, CYBORG Payroll system, VG LIMS, MAXCIM accounting system.
- Wrote three titles in the "Zinc It!" book series for Burke Publishing.
- Wrote *The Minimum You Need to Know to Be an OpenVMS Application Developer*.
- Wrote *The Minimum You Need to Know About java on OpenVMS*.
- Wrote and published *The Minimum You need to Know About logic to Work in IT*.
- Wrote *The Minimum You Need to Know About Service Oriented Architecture*.
- Participated in STAR standards meetings and helped create BOD (Business Object Document) definitions.
- Created XpnsQt OpenSource project.
- Finished publishing *The Minimum You Need to Know About Service Oriented Architecture*. Java, OpenVMS, ACMS, TCP/IP services covered/used in the book
- Created Fuel Surcharge OpenSource project using xBaseJ and Java.
- Wrote *The Minimum You Need to Know About Java and xBaseJ*.
- Wrote *The Minimum You Need to Know About Mono and Qt* using OpenSuSE Linux, Mono, Qt, PostgreSQL, MySQL.
- Wrote *Infinite Exposure*.
- Wrote *John Smith – Last Known Survivor of the Microsoft Wars*.
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Education

DeVry, Lombard, IL
B.S. C.I.S., 1987

Kankakee Community College, Kankakee, IL
A.S. Business Oriented Computer Programming, 1985