1. **Roland Hughes**

### Details

Herscher, IL 60941

630-205-1593

roland@logikalsolutions.com

theminimumyouneedtoknow.com

### Skills

Remote Working

Systems Architect

Application Architect

Business Analyst

Technical Writer

Business systems development

Medical Devices

Embedded Systems

SDLC

Touch screen interfaces

Debian Packaging

RPM Packaging

Custom ISO Creation

C++

Qt

CopperSpice

Ubuntu/Linux

SQLite

PostgreSQL

COBOL

XML

VAX BASIC

OpenVMS

RDB

ACMS

MQ Series

DIBOL

Indexed files

### Professional Experience

**C++ OpenSource Coding** **Aug 2020-Present**

**Logikal Solutions**

* Forked [Diamond text editor](https://www.copperspice.com/documentation-diamond.html) to enhance and experiment with [CopperSpice](https://www.copperspice.com/).
* Added EDT keypad navigation, file backups, Artistic Style integration, Themes, and many other features.
* Created Debian packaging scripts.
* Created RPM packaging scripts.

**Authoring** **Aug 2019-Aug 2020**

**Logikal Solutions**

* Completed [*The Minimum You Need to Know About the Phallus of AGILE*](https://www.theminimumyouneedtoknow.com/agile_book.html) and it is now available for purchase.
* Wrote *The Minimum You Need to Know About GUI Emacs*. Book is awaiting professional editing prior to release.
* Began writing *The Minimum You Need to Know About GnuCOBOL*.

**Qt Based Medical Device** **Jan 2019-Aug 2019**

[**Ximedica**](https://www.ximedica.com/) **– Plymouth, MN**

* Infusion pump for B. Braun.
* Convert QML mock-up to functioning product using Qt/C++ to glue touchscreen to actual pump logic.
* Qt 5.12 commercial

**Qt Consulting & Debian Packaging** **Oct 2018-Dec 2018**

[**Digitas**](https://www.digitas.com/en-us) **– Chicago, IL**

* Returned to division of [Publicis Groupe](https://www.publicisgroupe.com/en) to redevelop IPOS, a computer marketing/sales program for INTEL.
* C++ Qt programming for custom Web browser hooks.
* Debian packaging of IPOS allowing for custom advertisements.
* Custom Ubuntu ISO of IPOS as well. This also allowed for custom advertisements.

**OpenVMS Consultant** **Feb 2018-June 2018**

### Awards

*John Smith – Last Known Survivor of the Microsoft Wars*

2014 Fianlaist – Next Generation Indie Book Awards in catebory Science Fiction/Fantasy

*The Minimum You Need to Know to Be an OpenVMS Application Developer*

2012 Dr. Dobb’s recommended reading for developers

*The Minimum You Need to Know About Service Oriented Architecture*

2008 Best Books Award Winner in category of Business: Computers/Technology/Internet

2009 Finalist Eric Hoffer Awards

### Education

B.S. C.I.S. DeVry 1987

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

[**RADIAN**](http://www.radian.biz/page?name=HomePage)

* **Remote contract.**
* C programming on OpenVMS.
* Wrote utility to catch OPCOM messages and forward in RFC5424 message format to remote logging service via both secured IP and TLS.

**Authoring** **Oct 2016-Aug 2018**

**Logikal Solutions**

* Began writing [*The Minimum You Need to Know About the Phallus of AGILE*](https://www.theminimumyouneedtoknow.com/agile_book.html). This is a work of essays on the history of IT as lived by myself and one other spanning from the 1960s to present day.
* It is a collection of essays explaining why Waterfall SDLC was developed to be Software Engineering and why AGILE is just another in a long history of names for “Hacking on the fly.”

**Qt Consultant** **Sep 2016-Oct 2016**

[**Controltech Corp**](http://controltechonline.com/) **– Bondurant, IA**

* Direct client.
* Worked on Fusion building automation system.
* C++ Qt QML project developing for embedded Linux target using commercial Qt 5.4 on iMX6.
* Ported history tracking and graphing system to SQLite from a horrible performance strangling directory tree of JSON files.
* Rewrote fraphing system so it performed more accurately and much quicker with threaded off 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.

**Authoring** **Jun 2016-Aug 2016**

**Logikal Solutions**

* Wrote *Lesedi – The Greatest Lie Ever Told*.
* Middle book of *Earth That Was* trilogy.

**Qt Consultant** **Jan 2016-May 2016**

[**The Wittern Group**](http://wittern.com/?subject=Information from Selectivend) **– Clive, IA**

* Touchscreen embedded system coding for vending machines.
* Qt 5.5 targeting custom embedded Linux on Raspberry Pi.
* Required both serial and network communications.

**Qt Consulting and Debian Packaging** **Jun 2015-Sep 2015**

[**Leo Burnett**](https://leoburnett.com/) **– Chicago, IL**

* Division of [Publicis Groupe](https://www.publicisgroupe.com/en)
* Developed Linux version of IPOS, a computer marketing/sales program for INTEL.
* C++ Qt programming for custom Web browser hooks.
* Debian packaging of IPOS allowing for custom advertisements.
* Custom Ubuntu ISO of IPOS as well. This also allowed for custom advertisements.

**Qt Consultant** **Aug 2014-Feb 2015**

[**Cincinnati Test Systems**](http://www.cincinnati-test.com/)

* **Remote Contract** for previous client.
* Enahncements to [Blackbelt Pro](http://www.cincinnati-test.com/sentinel-blackbelt-p-10018-l-en.html) embedded system.
* Touchscreen application processing real time messages for pressure and leak testing.
* Linux Mint 13, SQLite, Qt 4.8.x OpenSource, Bitbake on an ARM processor.
* Both serial and TCP/IP real time communications with significant Qt threading and sockets.
* Dual SQLITE used for data storage.
* SVN used for source code management.

**Qt Consultant** **Dec 2013-Aug 2014**

[**Welch Allyn**](https://www.welchallyn.com/en.html) **– Beaverton, OR**

* C++ and Qt touchscreen coding for [Connex® Spot Monitor](https://www.welchallyn.com/en/products/categories/patient-monitoring/vital-signs-devices/connex-spot-monitor.html) patient monitoring device.
* Real time COOA messaging. Serialize and deserialize for internal common message queue.
* Target was embedded Linux (BitBake) on ARM processor.
* Team Foundation Server was used for source control.

**Qt Consultant** **Oct 2012-July 2013**

[**Cincinnati Test Systems**](http://www.cincinnati-test.com/) **– Harrison, OH**

* Creating [Blackbelt Pro](http://www.cincinnati-test.com/sentinel-blackbelt-p-10018-l-en.html) embedded system.
* Touchscreen application processing real time messages for pressure and leak testing.
* Linux Mint 13, SQLite, Qt 4.8.x OpenSource, Bitbake on an ARM processor.
* Both serial and TCP/IP real time communications with significant Qt threading and sockets.
* Replaced CAN system with Qt on OpenEmbedded communicating to RTOS via multicast UDP.
* Dual SQLITE used for data storage.
* SVN used for source code management.

**Qt Consultant**  **Jun 2012-Oct 2012**

**IPGhoster**

* **Remote Contract.**
* Product for real-time communications security. Allows customer to change IP address via database of proxy servers so they can appear to be in a different country and/or city. For international travelers it allows you to visit a Web site in a country blocked by or blocking yours.
* Performed Business Analyst, Systems Architect, and developer roles because this was a small startup.
* Heavy Qt threading and lots of performance improvements so we wouldn’t quickly drain batteries of laptops and phones.
* Development on Ubuntu Linux followed by Windows.
* Git for code management.
* Visual Studio IDE on Windows, QtCreator on Linux.

**Systems Architect & Qt Consultant** **Mar 2012-May 2012**

**The Concept Factory – Detroit, MI**

* Direct client.
* Embedded touchscreen development using C++ and Qt on embedded Linux.
* First project was for [Wolf](https://www.subzero-wolf.com/wolf) oven.
* Second project was dash replacement software for Chrysler using CAN-BUS real-time communications over Bluetooth. We also had serial port communications.
* SVN used for code management.

**Technology and Investment Blogger** **Dec 2011-Feb 2012**

[**Motley Fool**](https://www.fool.com/)

* Syndicated IT blogger and technical writer for Motley Fool.

**Authoring** **May 2010-Nov 2011**

**Logikal Solutions**

* Wrote [*The Minimum You Need to Know About Mono and Qt*](https://www.theminimumyouneedtoknow.com/mono_book.html).
* OpenSuSE Linux, Mono, Qt, PostgreSQL, MySQL.
* Mono is the OpenSource version of C# with .Net.

**DIBOL Consultant** **Feb 2010-Apr 2010**

**RC Olmstead – Dublin, OH**

* Converting DIBOL application on OpenVMS to Synergy/DE with xfServer to expose business logic to a Visual Basic GUI.
* This project covered the Teller Workstation portion of the credit union application. This system runs many credit unions across the country.
* Had to coordinate with off-shore teams while doing development.

**Authoring** **Jan 2009-Jan 2010**

**Logikal Solutions**

* Wrote [*The Minimum You Need to Know About Java and xBaseJ*](https://www.theminimumyouneedtoknow.com/xbase_book.html).
* Book covers using Java and the Open Source xBaseJ library for DBF creation on Linux platforms.
* Also involved making some patches to the xBaseJ project so the demonstration application could be complete.
* PDF of book donated to xBaseJ OpenSource project.
* Wrote [*The Minimum You Need to Know About Qt and Databases*](https://www.theminimumyouneedtoknow.com/qt_book.html).
* C++, Qt, PostgreSQL, MySQL, XBASE, and other database formats.
* Used 64-bit Kubuntu 10.04.

**OpenVMS ETL Consultant** **Nov 2008-Jan 2009**

**Fortunoff-Lord & Taylor – Long Island, NY**

* Remote and on-site contract.
* ETL (Extract Transform and Load) data conversion work from Fortunoff systems to Lord & Taylor.
* OpenVMS BASIC, COBOL, and DATATRIEVE.
* Target platforms were Tandem and IBM mainframe formats.
* Had to coordinate with off-shore teams.

**Business/Technical Analyst** **Feb 2008-Jul 2009**

[**Navistar**](https://www.navistar.com/navistar/) **– Warrenville, IL**

* Business Analyst – [STAR](https://www.starstandard.org/) (Standards for Technology in Automotive Retail) XML BOD specifications.
* Business Analyst – wrote SDLC documentation.
* Technical Analyst – TOLAS/PRIDE EDI modifications for Parts Supply Chain.
* OpenVMS, DEC/VAX BASIC, Java, MQ Series, Message Broker, Websphere, ACMS, Cognos Powerhouse, Oracle and RDB.
* Actively participated in the STAR standards committee.

**Authoring** **Nov 2007-Feb 2008**

**Logikal Solutions**

* Finished publishing [*The Minimum You Need to Know About Service Oriented Architecture*](https://www.theminimumyouneedtoknow.com/soa_book.html).
* Java, OpenVMS, ACMS, TCP/IP Services.

**Business Analyst & Business Architect** **May 2007-Nov 2007**

[**Navistar**](https://www.navistar.com/navistar/) **– Warrenville, IL**

* Direct Client.
* Business Analyst – provide system design and project management services interfacing the Parts Supply Chain OpenVMS ACMS real-time services to Web services via SOAP and XML over MQ Series along with other projects supporting the Parts Supply Chain run by TOLAS.
* Wrote SDLC documentation for SOX compliance.
* [STAR](https://www.starstandard.org/) (Standards for Technology in Automotive Retail) standards meetings and BOD creation.
* Business Architect – wrote work initiation documentation and early SDLC for parts ordering Web site to sell parts directly to the public routing sales through nearest local dealers. This system was actually implemented several years later.

**Authoring** **Jan 2007-May 2007**

**Logikal Solutions**

* Wrote [*The Minimum You Need to Know About Service Oriented Architecture*](https://www.theminimumyouneedtoknow.com/soa_book.html).
* Covers use of ACMS and Java to create clusterwide fault tolerant applications.
* BASIC, COBOL, C/C++, and FORTRAN back-end services.

**OpenVMS Consultant** **Aug 2006-Jan 2007**

[**H&R Block**](https://www.hrblock.com/) **– Dublin, OH**

* Electronic income tax filing system modifications.
* Mercury Quality Center, C/C++, Java, OpenVMS, DCL, MMS, CMS, FMS, and Perl.

**Authoring** **Mar 2006-Jul 2006**

**Logikal Solutions**

* Wrote and published [The Minimum You Need to Know About Logic to Work in IT](https://www.theminimumyouneedtoknow.com/logic_book.html).

**OpenVMS Consultant** **Sep 2005-Mar 2006**

[**H&R Block**](https://www.hrblock.com/) **– Dublin, OH**

* Electronic income tax filing system modifications.
* Mercury Quality Center, C/C++, Java, OpenVMS, DCL, MMS, CMS, FMS, and Perl.

**Authoring** **Jun 2005-Jun 2006**

**Logikal Solutions**

* Wrote “[The Minimum You Need to Know to be an OpenVMS Application Developer](http://theminimumyouneedtoknow.com/app_book.html).”
* Book covers the crucial definitions of the VAX/Alpha VMS operating system.
* Historical reasons for things existing at client sites the way they do are being given.
* DCL, DEC BASIC, CMS/MMS, FORTRAN, FMS, DEC C/C++, DEC COBOL, RDB, and MySQL.
* Book is designed to take a decent developer from another platform and let them become functional on VMS in a very short time span.

**OpenVMS Consultant** **May 2001-Mar 2004**

[**Navistar**](https://www.navistar.com/navistar/) **– Warrenville, IL**

* DIA (Dealer Inventory Alliance) project.
* Parts Supply Chain project for vendor managed inventory interfacing to five different BSV (Business System Vendors) systems at hundreds of dealers around the world.
* DEC/VAX C/C++, ACMS, MQ Series, TOLAS, Cognos Powerhouse, RDB, CDD, MMS, PL/SQL, XML, Pro\*C and Oracle 8i.
* The combination of ACMS and MQ were used to ensure guaranteed deliver and processing of all transactions, both delayed and real-time.
* Parsing of XML done with Xerces library on VMS.

**OpenVMS Consultant** **Jun 1999-May 2001**

[**Chicago Stock Exchange**](http://www.chx.com/) **– Chicago, IL**

* Direct Client.
* Returned to stock exchange client to participate with Decimalization project mandated by SEC. This was converting the stock market from trading in fractions to trading in dollars and sense.
* DEC BASIC/FMS system for real-time trade execution.
* CMS/MMS used for source code control.

**Cognos Powerhouse Consultant** **Dec 1998-Jun1999**

[**The Pampered Chef**](https://www.pamperedchef.com/) **– Addison, IL**

* Y2K project.
* Converted Powerhouse 710G applications for 4-digit years.
* Also had to modify Perspective 800 commercial ERP package written in DEC BASIC and DCL.

**OpenVMS Consultant** **May 1997-Dec 1998**

[**Navistar**](http://www.navistar.com/navistar/) **– Oak Brook Terrace, IL**

* Convert/rewrite PRIDE system from RDB/DB2/Netwise for communication from IBM mainframe to DEC/VAX to MQ Series.
* VAX C, VAX BASIC, CDD, CMS, MMS, DCL, TOLAS.
* Support for full EDI transactions.

**FORTRAN Data Conversion** **Apr 1997-Jun 1997**

**Edgewater Medical**

* **Remote Contract.**
* Extract and convert legacy PDP-11 based clinical system to a tape format the new AS/400 based system could read.
* RT-11, FORTRAN IV, and proprietary data compression library.

**Authoring** **Jan 1997-Mar 1997**

**Logikal Solutions**

* Wrote “Zinc It! 1.7.” Third book of “Zinc It!” series for Burke Publishing.
* Zinc Application Framework, C++, OS/2 Warp, Windows 3.x, DOS, and MAC OS.
* Watcom compiler for all but MAC. Code Warrior used on MAC.

**Cognos Powerhouse Consultant** **Jun 1996-May 1997**

**Caremark Homecare**

* Pharmacy system upgrades and maintenance.
* DEC/VAX, VAX BASIC, VAX COBOL, Cognos Powerhouse, RDB, CMS, and FMS.
* Both legacy maintenance and new development.

**C++ Consultant** **Apr 1996-Jul 1996**

**Shade Tree Software**

* Remote Contract.
* Commercial package for Kohler SOHO market for kitchen design.
* Zinc Application Framework, C++, Windows 3.x and MAC. Watcom and Code Warrior compilers.

**Various** **Mar 1985-May 1996**

* Various PC and DEC/VAX clients and employers.
* LIOCS Perspective series ERP, OpenVMS, VAX BASIC, VAX C, FMS, DCL, CMS, MMS, IBM COBOL, CYBORG Payroll system, VG LIMS, MAXCIM accounting system, RDB, PeopleSoft conversion, even a GRID PAD pen based DOS application.
* RSTS/E, BASIC PLUS II, DBASE, VAX FORTRAN.
* Airfone Inc, Crescent Counties Foundation for Medical Care, LIOCS, Nutrasweet R&D, Waste Management, Chicago Stock Exchange, McKee Door and probably more I’ve forgotten.
* Wrote two titles in the “Zinc It!” book series for Burke Publishing.