

# Thomas S. Ruby

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## Software Developer

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**Talented Developer with MSC degree and extensive experience in software and hardware implementations.**

Innovative software and hardware developer, experienced in analysis, design, development, testing, and implementation of diverse stand-alone and embedded database systems and applications programs. Productive in team-based and self-managed projects.

*Areas of expertise...*

- Software** Microsoft SQL and Office ~ Clarion ~ WinDev ~ Windows ~ C, C# & Embedded C ~ Web HTML, ASP.NET & CSS, Basic for Android, Encryption, Modula II, DOS
- Hardware** AVR Microcontroller, Arduino Microcontroller, NRF24L01+ Radio Modules, Atmel xMega Processor, AVR ATTiny 4313 Processors.

## Professional Experience

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Burger King

**Team Member**, 2015 to Present

Work closely with Restaurant Manager and other Team Members to provide exceptional customer service, support, and meet restaurant standards and procedures. Serve customers, taking orders, operating point-of-sale register, and delivering food.

Various

**Independent Contract Developer / Volunteer**, 2014 to Present

Design and develop multiple projects for outdoor model railroad system.

- Developed web programs for a convention to process guest registration and to support vendors' purchasing and reserving booth spaces.
- Designed, developed, and wrote a three-article series for Garden Railways Magazine that used Arduino microcontrollers to provide automation.
- Designed, built, and developed the C software for a radio and processor controlled outdoor model railroad system that detected train location and direction, and operated a three LED color signal bridge.
- Designed, built, and programmed a Volcano display with a customizable eruption schedule. Discovered a new manufacturer's bug in the controller.

AHT Services

2014

Maintained and updated Microsoft SQL and Clarion database software.

**Independent Contract Developer**, 2012 to 2013

Designed, programmed, and implemented various projects.

- Designed a custom model railroad control system with color TFT displays. Developed a working odometer for an outdoor model railroad.
- Designed and programmed a custom Android delivery driver system that downloaded daily routes and orders, and uploaded sales at the end of the day. Encrypted all data for confidentiality.
- Created and maintained the [midwestrails.org](http://midwestrails.org) website.

Crescent System

**Director of Development**, 2006 to 2012

Designed and implemented the newest version of Crescent's flagship product featuring Point-of-Sale (POS) peripherals, credit card integration, multi-site operation, internet communications, and SQL Replication. Used C#-based reporting and credit card processing systems to interface to the Clarion accounting, POS, restaurant manager, and tee booking programs. A Clarion program monitoring SOAP Requests accessed the tee booking system.

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- Designed and developed the user interface.
- Developed the database table structure, test vs production database structure comparison, and automated the table structure updating.

## **Independent Contractor, 1995 to 2006**

Developed and implemented various programs and projects under contract.

- Developed a food manufacturer's inventory system to track shipping destination of received product lots.
- Published a five-article series describing how to use relational calculus to simplify code in and another series of articles describing the benefits of each of the five database Normal Forms for 'Clarion Magazine.'
- Designed and developed a web store database and a web interface that scraped suppliers' product lists to indicate whether the product was on-hand or not available.
- Provided mainframe isolation from the web, by developing a CGI program that generated an EBCDIC file from the mainframe database to run independently on a PC web server. The PC generated a new Clarion database from the file for the web server.
- Designed and implemented a replacement temperature controller for a thermoset plastic oven.
- Created an inventory, sales, production scheduling for a frozen food manufacturer that tracked the lot numbers and received date of all ingredients, and where shipped, as well as standard inventory and sales functions. The system also enabled tracking specific ingredients and the outgoing orders.
- Wrote a Sybase SQL record management program for physician education information and certification services with a very large record database and installed it on a pair of off-the-shelf NT computers.
- Developed a warehousing program and hardware system to track products by floor location, pallet, and age. The system utilized an RF LAN, forklift-mounted laser barcode readers, a local workstation. Wrote individual order entry, forklift, palletizing, and warehouse management programs in Clarion for Sybase SQL backend.
- Created a Less-Than-Truckload (LTL) and Over-the-Road (OTR) routing and dispatch program in conjunction with non-GPS routing program to optimize routes, mileage, and time calculations.
- Wrote a Modula II warehouse inventory program and RS-232 communications for DOS handheld computer.
- Developed a DOS portable computer program to receive distribution companies' order and route information for drivers.
- Created a Clarion without SQL back-end Point-of-Sale system for gift shops.

## Career Notes

**Lead Programmer**, Legal Files Software

**VP of Development**, Computer Masters International

Kanoski & Associates

**Student Worker & Grad Assistant**, Western Illinois University

**Electronic Equipment Technician**, Honeywell Micro Switch

## **Education**

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**Master of Science in Computer Science**

**Bachelor of Science in Computer Science**

Western Illinois University, Macomb, IL

**Associate of Applied Science in Electronic Technology**

Highland Community College, Freeport, IL