

# Christopher J. Madsen

---

<b>Objective</b>	A programming job working alone or as a member of a team					
<b>Work experience</b>	2009 – Present	Self Employed	Richardson, TX			
<b>Freelance Consultant</b>						
▪ I write Perl scripts and modules under contract. <a href="#">PostScript-Report</a> was released to CPAN; my other work was not suitable for CPAN release.						
	2004 – 2009	TRX	Dallas, TX			
<b>ETL Programmer</b>						
▪ I wrote and maintained Perl scripts to Extract, Transform, and Load credit card and travel data from various formats into DB2 and MySQL databases. I also helped design and implement TRX's Generic File Processor framework to simplify this task.						
	1999 – 2004	Travel Technologies Group / TRX	Dallas, TX			
<b>Programmer for CoRRe and EnCoRRe</b>						
▪ I helped maintain CoRRe and EnCoRRe/CORREX using Borland C++ for Windows. This involved using multiple GDS reservation systems and Oracle databases.						
▪ In my spare time, I rewrote our email delivery system. The existing system was a combination of C++ and a homebrewed scripting language, was slow and difficult to maintain, and had numerous bugs. My version, written in Perl, is much faster, more reliable, and is still in use.						
	1993 – 1999	Schoolhouse Software	Denton, TX			
<b>Programmer for The PC GradeBook</b>						
▪ I wrote the DOS version of The PC GradeBook in C++ using Borland's Turbo Vision text-based windowing framework. I later ported it to Windows 95 using MFC, Visual C++, and the Standard Template Library.						
	1989 – 1993	Schoolhouse Software	Denton, TX			
<b>Apple II programmer for GradeBook IV</b>						
▪ I completely rewrote a menu-driven gradebook from Applesoft BASIC in 6502 assembly language, and gave it a spreadsheet-style interface. I was the sole programmer and the primary designer, with input from the company owner.						
<b>Education</b>	1989 – 1995	Youngstown State University	Youngstown, Ohio			
<b>Bachelor of Science, Summa cum Laude</b>						
Major: Computer Science		Minors: Physics and mathematics	GPA: 4.0			
<b>Awards received</b>	2004 — TRX XCELLER Award (2 <sup>nd</sup> Quarter of 2004)					
▪ One award is given each quarter per 100 employees to recognize top-performing employees nominated by their coworkers. I received it for my work on CORREX.						
1993 — YSU Undergraduate Award in Computer Science						
▪ One award is given each year for outstanding academic achievement in the study of computer science.						

1992 — Membership in Phi Kappa Phi

- Phi Kappa Phi was founded in 1900 to recognize and encourage superior scholarship in all academic disciplines.

1989 — National Merit Finalist

- YSU gave me an Outstanding Scholar's Award scholarship.

**Open Source work** My open source programs are available at my website, [www.cjmweb.net](http://www.cjmweb.net).

### **Perl**

- In 2010, I gave a talk about [PostScript-Report](#) at [YAPC::NA](#).
- In 1998, I rewrote the [Win32 IPC modules](#) (part of [libwin32](#)) to remove unnecessary code, fix an egregious bug, and remove some limitations in the API.
- In 1997, my Getopt::Mixed, Applell::Disk, MSDOS::Attrib, MSDOS::Descript, and Tie::CPHash modules were chosen to be part of [O'Reilly's Perl Resource Kit](#).
- A complete list of my Perl modules is available at <http://search.cpan.org/~cjm/>

### **GNU Emacs**

- I rewrote the internals of the Emacs `perform-replace` function to allow the replacement to be a Lisp expression. (Someone else has provided a better UI to this feature by using \\_, in the replacement string to indicate a Lisp expression.)
- Decipher.el, a tool I wrote in Emacs Lisp for solving cryptogram puzzles, became part of the GNU Emacs distribution from the Free Software Foundation in 1996.

### **C++**

- VBinDiff (Visual Binary Diff) is a tool for interactively comparing files at the byte level. I originally wrote it in 1996 for OS/2. I ported it to Windows and later added support for Linux (and other POSIX systems.)
- GUEmap was a program I wrote to learn Win32 GUI programming. It's a program for mapping interactive fiction games. I sold it as shareware for several years, then released it as open source in 2007.
- Fast File Validator is a tool for verifying files against a checksum file and for creating checksum files. It supports both CRC32 and MD5. (I'm using checksum in the generic sense. Technically, neither CRC32 nor MD5 is really a checksum.) I wrote the Windows version in 2000, and added Linux support in 2005.