

# Gregory Lo

608-179 George St.  
Ottawa, ON K1N 1J8  
(613) 882-4430

gregl.thegs@gmail.com

- <https://thegs.github.io/resume.html>
- <https://www.linkedin.com/in/gregory-lo-03b55b6/>

## Objective:

- Seeking full-time position involving software development and/or testing in an environment that encourages the incumbent to develop and acquire new skills.

## Interest:

- Special interest in user interface design, object-oriented application frameworks, development tools, graphics, and cross-platform programming issues.
- Fonts and font technology. Implementing code to programmatically manipulate PDF documents. Multilingual text handling.
- Low-level filesystem implementations, Web applications, distributed computing, and virtual machine implementations.

## Highlights:

- Over 20 years of professional programming experience, beginning early as a computing enthusiast.
- C, C++, Objective-C, Swift, Ruby, PHP, JavaScript, Perl, AppleScript, Java, Basic, FORTH, and other languages.
- Experience writing commercially shipping application software in mainstream software development environments, including: XCode, Microsoft Visual C++, Metrowerks CodeWarrior (C/C++/Pascal), and Symantec C++ for Macintosh.
- Application frameworks such as MetroWerks PowerPlant, MFC, Cocoa.
- Some experience writing an Adobe PhotoShop plugin.
- Graphic design and desktop publishing using such popular packages as: Quark XPress, Adobe PageMaker, Adobe PhotoShop, CorelDRAW!, Ventura Publisher.

## Employment eligibility:

- Canadian citizenship.
- Australian-born — can resume Australian citizenship.

## Selected Work and Volunteer Experience

11/2005 - 05/2017

### Senior Software Engineer

FileMaker Canada, Inc.  
Ottawa, Ontario

- Implemented a scheme using Mach kernel IPC and MIG (the Mach Interface Generator) to connect an Intel-based macOS application with a PowerPC-based third-party library years before high-level alternatives such as Apple XPC Services became available.
- Created a cross-platform file-system abstraction for consistent access to file-streams and directories inside of archives and native file systems. Wrote original code to implement cross-platform read and write access to ZIP archives on top of this abstraction.
- Led technical efforts to implement a feature for the import and export of data to/from Excel 2007 (.xlsx) file format into a relational database.
- Responsible for printing architecture of desktop and server products, supporting printing of reports, schema, scripts, and PDF generation of the same
- Implemented a feature to remember (and re-apply) selected printers in a cross-platform application.
- Implemented a feature to allow PDF generated through the product's user scripting to be easily appended to existing PDF files.
- Re-implemented a graphical editor for interactively manipulating relationships in a relational database to work on top of a cross-platform lightweight view system.
- Led technical efforts to replace use of a commercial third-party PDF generation library with a newer, more open, cross-platform third-party alternative.
- Wrote a number of internal tools to aid in software quality assurance, including small apps for comparing PDF files, inspecting capabilities of printers, and inspecting various types of font files.

#### Shipped products:

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| ◆ FileMaker Platform 16             | ◆ FileMaker Pro and Pro Advanced 11  |
| ◆ FileMaker Pro and Pro Advanced 15 | ◆ FileMaker Pro and Pro Advanced 10  |
| ◆ FileMaker Pro and Pro Advanced 14 | ◆ FileMaker Pro and Pro Advanced 9   |
| ◆ FileMaker Pro and Pro Advanced 13 | ◆ FileMaker Pro and Pro Advanced 8.5 |
| ◆ FileMaker Pro and Pro Advanced 12 |                                      |

05/1998 - 11/2002

### Software Developer

Corel Corporation  
Ottawa, Ontario

- Added user interface features, performed pre-alpha testing and fixed bugs in currently shipping products.
- Worked primarily in large team to develop cross-platform framework (implementing Win32 API on both Classic Macintosh and MacOS X platforms) using C++ and plain C.
- Cross-platform menu subsystem specialist. Implemented Win32 menu APIs using Mac Toolbox and Carbon APIs. Wrote an MDEF to implement the Win32 owner-draw behaviour.
- Font technology and text-handling specialist. Implemented Win32 font handling and access APIs using Mac Toolbox and Carbon APIs
- Developed and maintained local team documentation website and groupware server, gluing together various Perl and PHP-based web applications.

Shipped products:

- |                                     |   |
|-------------------------------------|---|
| ◆ CorelDRAW! Graphics Suite 11      | ◆ Corel PrintHouse 5                    |
| ◆ Corel Graphics Suite 10 Macintosh | ◆ Corel PhotoHouse Magic 5              |
| ◆ CorelDRAW! 10 Graphics Suite      | ◆ Corel PrintOffice 2000                |
| ◆ Bryce 5                           | ◆ MacPort Win32 bridge framework        |
| ◆ Carbonized Bryce 4                | ◆ Corel Trace 8 for PowerMacintosh      |
| ◆ CorelDRAW! 9                      | ◆ Corel PhotoPaint 8 for PowerMacintosh |
| ◆ Corel PrintHouse 2000 Macintosh   | ◆ CorelDRAW! 8 for PowerMacintosh       |

05/1996 - 09/1996

### Software Developer and Tester

Corel Corporation  
Ottawa, Ontario

- Added user interface features, performed pre-alpha testing and fixed bugs in currently shipping products using C++.
- Evaluated third-party software packages for bundling.

Shipped products:

- ◆ Corel CD Creator for Macintosh v1.1
- ◆ Corel VIDEO v1.6 (Enterprise video solution - Macintosh platform client)

07/1995 - 04/1996

### Production Manager

*The Queen's Journal*, Volume 123 (Alma Mater Society of Queen's University Inc.)  
Kingston, Ontario

- Responsible for production process and final appearance of each issue of major biweekly (two issues per week) college newspaper.
- Managed (and trained) pool of production contributors.
- Coordinated layout schedules and use of computer resources. Developed more streamlined computer-based document workflow from copy-editing through to camera-ready flats.
- Oversaw transition from Aldus (Adobe) PageMaker software to Quark XPress as primary instrument for layout of paper.

## Education History

1993 - 2000

### Queen's University

Kingston, Ontario

- ◆ B.Sc. (Honours) degree, Computer Science (2000)
- ◆ B.Sc. degree, Computer Science (1998)

1988 - 1993

### Unionville High School

Unionville, Ontario

- ◆ Ontario Secondary School Diploma, Ontario Scholar