

JACOB EWING

✉ jacob.ewing@gmail.com

☎ (613) 200-7619

📍 Lanark, ON

🌐 github.com/jacobEwing

🔗 weirdly.net

PRIMARY IT SKILLS

PHP, JavaScript, C/C++

HTML5, CSS3

Apache, MySQL, DNS, SSL

Version control (Git)

GNU/Linux (Ubuntu,

Fedora, Debian, Other)

PAST EXPOSURE

Windows, MacOS, MS-DOS

Python, Java, Assembly,

Pascal, BASIC, COBOL

SVN, CVS

PostgreSQL, PL/SQL

PERSONAL INTERESTS

Game Development

Lego, Robotics, Automation

Origami, Pixel art

Cycling

Professional Experience

May 2020 - Present: Personal Development

In the period since leaving Curling Canada, I have continued to maintain and expand my existing skill set.

Activities in this period included personal studies (programming, mathematics, robotics), website development (a complete rewrite of <http://www.weirdly.net>), game development (online games available on weirdly.net), and keeping existing skills up to date (full stack development, server administration, etc.)

July 2015 - May 2020: Web Application Developer Curling Canada

Designing, developing and maintaining full-stack web applications running on a Linux/Apache/MySQL/PHP platform, as well as Server administration, and Internal technical support. The main projects I developed were:

- **Web platform for hosting internal tools and services**
Done from scratch, implementing a GNU/Linux system and creating the data management tools and basic interface.
- **Internal requisition and expense system**
A system for managing the full process from expenses and purchase requisitions through approval, tracking and budget maintenance.
- **Volunteer sign-up and management system**
A method of allowing volunteers to sign up for events, allocating them to teams, scheduling tasks, and printing badges.

Tools used here included Linux, Apache, MySQL, PHP, JavaScript, jQuery, HTML5, CSS3 and Bootstrap. Skills included server administration, UI development, code optimization and system security.

June 2009 - July 2015: Software Developer Lightbox Technologies

Developing and maintaining web sites and applications to run on LAMP and LAPP platforms. Other tasks include server maintenance and client care. My contributions here span a wide range of projects, including:

- **Stock trading systems (PHP, Python, JavaScript, Django, MySQL)**
Much of our later work was focused on the development, maintenance and operation of three separate web sites, each of which fills a different niche in the trading of bitcoins and other crypto-currencies. This requires extreme care in security and data accuracy, as well as strong code testing.
- **Online training system (PHP, JavaScript, PostgreSQL)**

My main focus upon starting here was the maintenance and extension of a client's online training system used for companies with large employee bases. Some of my contributions to this system include:

- A "One Armed Bandit" game, with server controlled (AJAX) winning probability and scheduled prize allocation.
 - A "Monster Truck" game in which the player drives a sport truck up and off of a ramp with the ambition of clearing a set of obstructions. Again controlling wins server-side via AJAX.
 - The administrative system for managing and reporting on prizes won from those games.
 - A system for automating database updates for end clients, synchronising them with SVN code updates.
- **Science Fair In A Box (JavaScript, jQuery, PHP, MySQL)**
Another major focus on this job was maintaining "Science Fair In A Box" (sfiab.ca). SFIAB is an open-source system for administering science fairs, used nationwide in Canada, and in parts of the U.S. Much of my contribution is in updating the trunk version of the code to handle multiple fairs simultaneously, as well as alternate fair types. This required a major restructuring of the database and all of the code using it.
 - **Website Development/Maintenance (JavaScript, jQuery, PHP, MySQL, Apache)**
The other major focus of this job was to develop and update web sites for various clients. This work is primarily done using HTML5 standards on a LAMP system.

Working here, I have gained valuable knowledge and experience in several tools, systems and languages, including PHP, JavaScript, the jQuery library, PostgreSQL, MySQL, Python, SVN, Apache, GNU/Linux systems, CSS, HTML5, and Awk.

May 2008 - December 2008: Game Programmer and Developer

Beanbag Studios

Working both independently and as a team member on the development of computer games. Within my stay at Beanbag Studios, my key accomplishment was the development of the game "Card Games For Dummies" (not yet published). I entered this project in the initial development stages, and carried it through to the final product.

My key contributions to this project are:

- Writing the gameplay logic for eight of the ten included games
- Developing the AI players for competing in each of the games. This included a wide range of necessary AI strength, from simple games such as "Crazy Eights" to more complicated ones like "Spades".
- Initial design of game levels
- Integrating tailored visual and audio artwork into all of the games
- Resolving bugs and adding new features as requested

Additional Accomplishments:

- Gaining a working knowledge of the language TorqueScript, as well as in-house libraries
- Contributing to in-house libraries with the development of a versatile undo handling system

March 2006 - March 2008: Technical Support Engineer Sitebrand Inc.

Assisting clients with the integration and use of scripts within their web sites. This position required strong development skills with the ability to quickly diagnose and debug client code. Functions in this job included:

- Developing and customising code to fit the individual needs of clients
- Helping clients build and integrate dynamic scripts into their web sites
- Quality Assurance and product testing
- Troubleshooting technical problems with data capture, code execution and system performance
- Contributing ideas and design suggestions for new versions of the system
- Database administration
- Managing SSL certificates for clients
- Internal network management and IT services

Additional Accomplishments

- Designed and developed software to fetch client data, test for errors and conflicting records, and pass it into a master table through ODBC. (PHP, MySQL, HTML, Awk)
- Wrote static code that clients could use to report transaction data on "Yahoo" shopping carts. (JavaScript)
- Created instruction and command list generators for ordering, renewing, and implementing SSL certificates for individual clients. (PHP, HTML, Awk, Curl)
- Created a database and web interface for managing unique IP addresses assigned to individual clients. (PHP, MySQL)
- Wrote a series of scripts for generating "canned answers" for client issues. (PHP)

September 2003 - March 2006: IT Support Specialist IGS/Avalon Works

Working with a small group of IT professionals in a variety of technical roles. Tasks included end-user technical support, developing and maintaining web pages and server scripts, debugging previously developed software, and setting up web hosting for businesses and end users. Accomplishments on this job included:

- Design and development of a web form used for deleting oversized e-mails from the server.
- Built a dynamic web interface allowing customers to sign up for DSL service.
- Created a script that alerts staff when time-sensitive tasks are approaching their due-date.

- Developed a database and series of web forms for tracking inventory.
- Other responsibilities included collecting and maintaining call statistics, configuring hardware for the customers, registering domains and maintaining DNS records and domain information.

January 2000 - August 2003: Technical Support Adviser Convergys/Taima Corp

A team member in a call centre responsible for providing technical support for the customers of various internet providers throughout Canada and the US. Duties included troubleshooting connectivity issues on dial-up, ISDN and cable, walking customers through setting up and working with internet software (browsers, mail, FTP, etc.), and resolving abuse and billing issues. Other duties include logging all calls with call-tracking software (HEAT, Remedy), and meeting service level targets such as call length, closure rate, and availability. Customer service and professionalism are important and ever-present considerations when on the job.