

StevenHall

Software Engineer

Contact

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Languages & Frameworks

JavaScript / jQuery
CSS / SASS / Bootstrap
MobX
MySQL / PostgreSQL
PHP / Laravel
HTML
Golang
C / C++
Haskell
Python / Selenium
TypeScript
VimScript
Bash Script
Java

Tools

Jira
Git / SVN
Github / Bitbucket
Google Ad Manager
API
JSON
XML
Linux (CLI proficient)
Vim

Soft Skills

Scrum / Agile
Project Leadership
Communication
Problem Solving
Mentoring

Summary

- Full-stack software engineer with over 6 years of experience designing and developing scalable, user-friendly web applications.
- Proven track record in leading major frontend and backend projects, including the complete rewrite of an award-winning video player, resulting in a 4x reduction in code size and enhanced performance that saved the company from months of lost revenue.
- Skilled in JavaScript, PHP, relational databases, and modern frameworks like MobX.
- Adept at mentoring junior developers, optimizing code efficiency, and driving innovation in both corporate and open-source environments.
- Seeking to apply my technical expertise and leadership skills in a dynamic, growth-focused team to build cutting-edge software solutions.

Work Experience

STN Video *Full Stack Web Developer*

Oct 2020 - May 2024

- Completely rewrote our award-winning Smart Match video player frontend from the ground up using the MobX reactivity framework.
- The code became easier to maintain and the file was 4x smaller while improving speed and revenue.
- The rewrite saved us from losing months of revenue because of a change that was made to Google Chrome's Heavy Ad Intervention.
- Writing and maintaining Player tests, improving the reliability of our code by catching bugs before a release.
- Created a new Admin tool on our Dashboard to expose how the player's AI ranks video matches for a publisher's article, improving the company's ability to understand why our AI chooses certain videos over others.
- **Skills:** Remote Work, JavaScript, jQuery, MobX, Agile, Scrum, MySQL, Git, Python, Selenium, Jira, PHP, Laravel, CSS, SASS, Bootstrap, Eloquent, Google Ad Manager, JSON, XML, Bash, Vim

LinuxMagic *Full Stack Web Developer*

April 2018 - May 2020

- Worked on feature enhancements, customer requests, and bug fixes for our carrier grade email platform (MagicMail), CRM, sales system, and product websites (MagicSpam, SpamRATS)
- Migrated the sales system from an Oracle database to PostgreSQL.
- Led a project to redesign and rewrite the SpamRATS product website from the ground up.
- Completed work orders for customers by communicating directly with the customer and performing their development work in a timely and professional manner.
- Mentored new Web Developer hires.
- **Skills:** JavaScript, jQuery, CSS, Bootstrap, Proprietary PHP MVC Framework, CakePHP, MySQL, PostgreSQL, SVN, Agile, Scrum, Bash, Vim

UBC *Big Data Research Assistant*

May 2016 - Aug 2016

- Goal: To share memory (RDDs) across Apache Spark instances through a unified memory manager.
- **Skills:** Scala, Python, Hadoop, Apache Spark, Git, Bash

- Tested and developed QoS and PBR software solutions on a variety of Ericsson's enterprise scale routing platforms using manual router configurations and Perl scripts for testing.
- Presented demos showing the functionality and progress of policy-based routing during the testing and development phases.
- **Skills:** C, Perl, Git, CVS, Bash

Open Source Contributions

Reporting Documentation Error to MDN Web Docs

Sept 2022 - Aug 2024

- I discovered an undocumented stacking context trigger in the MDN Web Docs, which is a unified repository for documentation on web standards.
- At the time, it was not clear if it was a browser bug, or incomplete documentation. It turned out to be part of the feature specification so the documentation was just missing a reference to it.
- The MDN Web Docs has now been updated to reflect this feature that I found.
- **Skills:** CSS

Found a Browser Crash Bug In Microsoft Playwright

Oct 2021

- My Firefox browser would crash when running a particular test that used the apstag.js script from Amazon.
- I found that it appeared to be related to Firefox shimming that script internally which interfered with how Playwright worked.
- Microsoft fixed this bug a few weeks later.
- **Skills:** Playwright

Youtube Playlist Search Chrome Extension

April 2021

- This is a project that I started which has 72 Stars on GitHub (as of September 17th 2024).
- Goal: Create a chrome extension that is able to search for videos in large playlists by filtering channel names and video titles.
- Includes a custom built searchable dropdown list of channel names you can filter by.
- The search filters are persistent per playlist across your devices.
- Custom built lazy loading that loads 25 or so videos at a time in the view, while being able to search the whole playlist.
- Very large playlists have their video metadata saved for faster retrieval the next time the extension is opened.
- **Skills:** JavaScript, Youtube API, CSS, HTML

Go Git Radar

Nov 2020

- My Golang clone of "Git Radar" that is 5x faster for large repositories with additional features for enhanced usability.
- The original "Git Radar" was written in Bash which was inherently slow with large git repositories.
- This project gives you a "heads up display" for Git in your bash prompt. In other words, it gives you a summary of the state of your repository in your Bash prompt.
- I was able to dramatically improve the speed by making use of goroutines.
- **Skills:** Golang

TV Show Notification and Calendar

May 2020

- This is a project that I started.
- Created a Google App Script that retrieves air dates for episodes of TV Shows that I watch. The script uses that information to figure out what episodes I don't have in my Google Calendar already and will automatically add them for me.
- **Skills:** Google App Script

Gravity

Mar 2017 - Apr 2018

- Follow the link to see all 36 of my merged pull requests.
- Gravity is a dynamically typed, lightweight, embeddable programming language written in C without any external dependencies (except for stdlib).
- Gravity is the core language built into Creo, which was a project created to make it easier to write code for iOS and Android. Creo is no longer available.
- I fixed countless compilation warnings.
- I fixed and contributed to the documentation and automated tests.
- I added bitwise operations. string manipulation and retrieval functions. a random number generator. and math functions to Gravity.

Git Radar

Oct 2015 - Jan 2016

- Follow the link to see all of my merged pull requests.
- This project gives you a "heads up display" for Git in your bash prompt. In other words, it gives you a summary of the state of your repository in your Bash prompt.
- I added a configuration variable to customize the time between automatic "git fetch" commands.
- Fixed a "git stash" error in the script.
- I was active in the reported issues, offering suggestions and solutions to other users and contributors.
- **Skills:** Bash Script, Github

Education

University of British Columbia

Sept 2013 - Dec 2017

- Bachelor of Applied Science (BASc) in Software Engineering

Kwantlen Polytechnic University

Sept 2012 - April 2013

- Engineering Certificate

Interests & Activities

- Learning and trying new things
- Skiing, snowboarding
- Baseball, hockey, lacrosse
- Walking, running, hiking
- Travelling