# **Arthur Axel "fREW" Schmidt**

Santa Monica, CA, United States (228) 369-4492 stackoverflow@frew.co https://blog.afoolishmanifesto.com

I love programming. I mostly do web development and have released numerous open source <u>modules</u> to make developing web apps easier. I regularly contribute to other open source projects when I see a need. For nearly four years I released a <u>module on cpan weekly</u>.

I started programming QBasic for fun in middle school, and quickly got into using <u>unix</u> and Perl. When I was in 10th grade I wrote a system for a Pawn Shop to keep track of redemption rates and more using Perl and MySQL.

In college I started using Ruby for personal projects and that is where I got a better understanding of Functional Programming and OO to an extent. About halfway through college I started working with another student on <u>TOME</u>, which is a system to help students share books. It was in that context that I learned to do more complex Perl programming as well as lots of Javascript, HTML, CSS, and complex database interactions.

More recently (See ZipRecruiter below) I've been involved in efforts to scale a system to many millions of users without significantly increasing infrastructure cost. Much of this has been increasing visibility into our system, but also some of the work is making sure that pathological code does not harm the rest of the system.

## **Important Links**

CPAN modules: well tested, well documented, released code.

github code: experimental code that may never actually get released, but still may be worth looking

blog: writings, almost exclusively technical.

presentations: talks at conferences that show my teaching style

#### Technical Skills

Likes: perl dbix-class go linux

#### **Experience**

**Senior Software Engineer** – ZipRecruiter perl, mysgl, catalyst, dbix-class, amazon-web-services

Jul 2015 → Current

As one of the members of the core team I am responsible for the infrastructure that runs  ${\sf ZipRecruiter}.$ 

Here are some blog posts I've written about cool stuff I've done at work:

- How to bolt timeouts on to MySQL 5.6
- How to bolt timeouts on to an internal webservice
- How to efficiently log or count database queries
- Email Bot for explaining AWS Retirement Notifications

Other things I've done which I have yet to write much about include:

- · Across the board logging and monitoring improvements
- Memory reduction in web workers
- Reduction in load on the central database
- Performance improvements in realtime code

Major responsibilities include management of two software engineers, code review, and ultimate responsibility of the technical aspects of the LynxGuide Duress and Mass Notification system.

Major Achievements include:

- · Migrated project from single large Subversion repository to a Git repository, along with issue tracker integration, and a code review system.
- · Wrote and set up automated testing against a small matrix of databases/operating systems using Jenkins
- · Migrated from engineer driven, manual upgrades to automatic upgrades using Nullsoft Scriptable Install System
- Quickly created a new product using a Raspberry Pi and entirely asynchronous Perl, allowing high performance with low resource usage
- Migrated significant portion of codebase to portable SQL to allow running against PostgreSQL

Web Developer - Micro Technology Services Incorporated  $perl,\,apache,\,mod\text{-}perl,\,sql\text{-}server,\,dbix\text{-}class,\,catalyst,\,cgi\text{-}application,\,extjs}$  Aug 2008 → Oct 2010

• Initiated and switched from IIS to Apache because of serious Perl interop issues

- Initiated and helped switch to CGI::Application from cgi scripts to encourage modularity and reuse in older projects
- Initiated and helped switch to Catalyst from CGI::Application to increase overall organization of projects in new
- Initiated and helped switch to <a href="DBIx::Class">DBIx::Class</a> to promote code reuse and reduce dependence on SQL Server

# Programmer – Loma de Luz

May 2007 → Aug 2007

Initiated and designed a system to track inventory and inventory history.

Basic IT support.

#### Programmer - Sterling Commerce

May 2006 → Aug 2006

java, c#, connectdirect

Changed Java client to store configuration as XML instead of serialized Java class.

Created .NET configuration GUI.

#### **Education**

#### B.S. Computer Science and Math - LeTourneau University regular-expressions, object-orientation, project-management

2004 → 2008

Senator, and later President Pro Tempore

President of TEA (TEA Enthusiasts Association)

President of Math Club (We won first place in TX competition)

Worked on, and later headed up the  $\underline{\mathsf{TOME}}$  project.

### **Projects & Interests**

#### Stack Overflow - http://stackoverflow.com/users/12448/frew-schmidt

2008/09 → Current

Written 32 answers. Active in perl.

#### DBIx::Class::Candy - https://github.com/frioux/DBIx-Class-Candy perl

Jul 2010 → Current

Sugar for the Perl ORM

Creator and Maintainer

 $\textbf{DBIx::Class::DeploymentHandler} - \text{https://github.com/frioux/DBIx-Class-DeploymentHandler} - \text{https://github.com/frioux/$ 

May 2010 → Current

Best in class database deployment tool that leverages DBIx::Class as well as easing the deployment of DBIx::Class schemata.

Creator and Maintainer.

DBIx::Class::Helpers - https://github.com/frioux/DBIx-Class-Helpers

perl

Significant additions to DBIx::Class (the Perl ORM) via a large number of plugins

Creator and Maintainer (though there are a handful that have been contributed.)

#### **Public Artifacts**

How to replace your CyanogenMod Kernel – https://blog.afoolishmanifesto.com/posts/replacing-your-cyanogenmod-kernel-for-fun-and-profit/

A very popular article I wrote on how and why someone would replace the kernel on their telephone.

Hash Your Passwords! Finale - https://blog.afoolishmanifesto.com/posts/hash-your-passwords-finale/

I've posted about how to hash passwords at least three times. This is the most recent post with the best way to do it.

A Gentle TLS Intro for Perlers – https://blog.afoolishmanifesto.com/posts/a-gentle-tls-intro-for-perlers

Some basic info on how to set up a TLS server in Perl

Set-based DBIx::Class - https://blog.afoolishmanifesto.com/posts/set-based-dbix-class/

An efficient (both for humans and machines) methodology to use DBIx::Class

### Readings

Masterminds of Programming: Conversations with the Creators of Major Programming Languages (Theory in Practice (O'Reilly)) – Federico Biancuzzi, Chromatic – http://www.amazon.com/Masterminds-Programming-Conversations-Creators-Languages/dp/0596515170%3FSubscriptionld%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0596515170

Coders at Work: Reflections on the Craft of Programming – Peter Seibel – http://www.amazon.com/Coders-Work-Reflections-Craft-Programming/dp/1430219483%3FSubscriptionld%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D1430219483

Understanding Computation: From Simple Machines to Impossible Programs – Tom Stuart – http://www.amazon.com/Understanding-Computation-Machines-Impossible-Programs/dp/1449329276%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D1449329276

**Tools** 

Favorite Editor: Vim