Daniel Enman, B.Sc

CONTACT Information

 $+1~(902)~754\text{-}8288\\enmand@gmail.com\\http://github.com/enmand$

About Me I am a graduate of St. Francis Xavier University in Mathematics and Computer Science. I have worked on a number of different projects, large and small, ranging from web and software development and systems administration to research and analysis. I've also made contributions to open source projects, and continue to find ways to contribute to the open source community.

Thesis

(2010) B. Sc Thesis: "An Introduction to Projective Geometry: Conics". Supervised by T. Bruen, Mathematics Statistics and Computer Science, St. Francis Xavier University

EDUCATION

Saint Francis Xavier University, Antigonish, Nova Scotia

B. Sc Advanced Major in Mathematics

- Participated in the ACM programming contest at APICS 2009
- Participated in the William Lowell Putnam Mathematics competition

Partial list of Mathematical/Computer Science Courses taken:

- Calculus I/II/III and Vector Calculus
- Real Analysis I/II
- Complex Variables
- Partial Differential Equations
- Discrete Mathematics and Combinatorics
- Modern (Abstract) Algebra
- Mathematical Modelling
- Probability and Mathematical Statistics
- Data Structures
- Algorithm Analysis
- Object Oriented Programming Paradigm
- Operations Research
- Computational Physics

High School Diploma (High Honours), Prince Andrew High School, June 2006

• Received award for recognition in Computer Science

Professional Experience

znanja Inc.

Co-Founder & CTO

January 2012 – February 2014

My role at znanja is partially a continuation of my work at Velsoft. znanja is an eLearning platform, that blends content conversion with content delivery into a platform that allows instructors, training facilitators and others to create, convert and deliver their content in real-time, and deliver it to their students in an easy, customizable and effective way. My responsibilities at znanja as co-CTO are to work with the rest of the engineering, marketing and sales team to define, develop and deliver a top-notch eLearning platform. This platform is built using a multitude of technologies including: Linux, SmartOS (Solaris 10), Python, Node.JS, C++, JavaScript.

Additionally, part of my role is to communicate with our customers, and our support team to balance our product with the needs of our customers, as well as provide customers with the best experience we can offer. This includes communicating with large enterprise customers as well as small and medium sized businesses to figure out, and help implement ideal solutions to each unique problems some organizations present.

Velsoft Training Materials Inc.

Sr. Software & Infrastructure Engineer

April 2010 - March 2012

My role at Velsoft was a varied one, and one that was continually changing and expanding. My chief responsibility here is as a software and infrastructure engineer. In this role, I worked with our development and our systems team to develop amazing eLearning applications on our own eLearning platform, while enhancing and expanding the platform itself. This afforded me a great deal of experience with the entire stack, ranging from our Linux and Solaris servers, to the Python, C++, NodeJS and PHP codebase. Given that we dealt with large amounts of content and data, we continually found and developed ways of viewing, and analysing that data to provide a comprehensive overview of our platform's health, customer's content, student responses and scoring, as well as help to define overall customer strategies.

Additional to my role as an engineer, I also managed the team of software and systems engineers and the overall infrastructure that they rely on, on a day-to-day basis, including both our internal infrastructure, and our external customer facing infrastructure. Our internal infrastructure existed in-house, and consisted of all types of servers ranging from our directory server (Active Directory on Windows Server 2008 R2) to our project management suite (the Atlassian suite including JIRA, Confluence and Bamboo) and our development infrastructure. The external interface existed on a combination of Amazon AWS (EC2, S3, Route53) and Joyent's SmartDataCenter hosted privately. My team also managed internal services such as VPN, GPO and workstation management, and customer facing services behind OAuth 2.0, such as our Courses API and our eLearning API.

Velsoft has provided me the opportunity to build and develop scalable, high-use applications built on a number of technologies, including NodeJS, and Amazon's AWS cloud. At Velsoft I grew both as a developer, and as a manager. I have managed and developed with large teams, and small teams. I have also lead in the release of patches back to the open source community, and the open sourcing of many of the libraries we use internally.

Freelance and Open-Souce Developer

DevOps Engineer and Consultant

2004 - present

I have been working as a freelance and open-source developer for a number of years, and have worked on many open-source projects, including as co-lead developer on the Cerenkov framework (now defunct). I have developed numerous websites using this framework. I also have experience with other frameworks, including the Zend Framework, and KohanaPHP. Many of my open source contributions can be found on my GitHub account at https://github.com/enmand.

I have done PHP Development work for some local and non-local companies including;

- Highland Multimedia (http://highlandmultimedia.com)
- Impact Communications (http://impactcommunications.ca)

A small sample of my work includes patches for the following projects:

- Kohana PHP Framework
- SVN PECL
- nodesvn (https://github.com/enmand/nodesvn)
- nodegears (https://github.com/enmand/nodegears)

Software Developer (Intern)

July 2009 - Aug 2009 (summer term)

With Gatermaster, Inc. I was responsible for helping build a new "Internet Rental Listings" website, where landlords and tenants could connect with each other in new ways. One of the tasks I was charged with was creating the Tenant "Application Centre" where applicant tenants could create and store information on their application. Along with the "Application Centre", I was also partially responsible (together with the Sr. Software Developer) for helping put the system together in its entirety. The development work was mainly in PHP, though there was a significant amount of JavaScript (using the jQuery library). The database used to store and process the large amount of information was Firebird.

Computer Skills

Programming Languages

- Python
 - Python 3
 - Python 2
 - Pyramid
 - Django
 - SQLAlchemy
- Ruby
 - Rails (Ruby on Rails)
- JavaScript
 - Backbone.js
 - Underscore.js
 - jQuery
- PHP
- Node.JS (and V8 core)
- HTML (HTML5, CSS3, etc)
- C
- C++
- Database (relational and "NoSQL")
 - PostgreSQL
 - MongoDB
 - \bullet Redis
 - MySQL
 - Firebird
 - ORACLE 9i
- Java

Operating Systems

- Linux (including Ubuntu, Debian, ArchLinux, Gentoo)
- Solaris (Illumos, SmartOS, OpenIndiana)
- FreeBSD (6-RELEASE and pfSense)
- Mac OS X, including OS X Server
- Microsoft Windows (7, 2008 Server R2)

Miscellaneous

- OpsCode Chef (Using "chef-solo")
- Juniper ScreenOS 6.3
- IPSec, OpenVPN
- Gearman/Asyncronous job processing
- Memcached and caching algorithms
- Working knowledge of OAuth, OAuth2.0 and Hawk
- Working knowledge of SCORM 1.2 and SCORM 2004