

Ryan Flynn
198 Flax Hill Rd #12 Norwalk, CT 06854
646-413-3492 parseerror@gmail.com

OBJECTIVE

A software development position with special interest in backend systems.

SKILLS

Languages:

- Python
- SQL (MySQL, Postgresql, sqlite, SQL Server)
- Javascript/jQuery
- HTML/HTML5/CSS
- C
- C++
- C#
- bash shell scripting
- Erlang

Tools:

- UNIX: Linux, Mac OS X, FreeBSD
- Microsoft Windows
- Git/Subversion/CVS/TFS
- Microsoft Visual Studio
- GCC/Clang
- Jenkins
- JIRA
- Parallels/Virtualbox/VMWare
- Apache/lighttpd/nginx
- Microsoft Office

EXPERIENCE

Senior Software Engineer

May 2014 – current

Peep Mobile Digital, New York, NY

- Reverse-engineered proprietary C# server's API protocol in HTTPS/JSON/OAuth
- Wrote, maintained protocol tests and automation suite on Windows/OS X/Linux in Python
- Aided programmers writing mobile clients for IOS, Android and HTML5 as protocol expert
- Performed ad hoc QA and load testing as needed, identifying several issues

Senior Software Engineer

Jan 2012 – Oct 2013

Winamp / AOL, Dulles, VA

- Lead developer and architect of Winamp Cloud service backend: designed, developed server and protocol for combining/synchronizing a user's media library across multiple devices into a unified collection. Supports synchronized cross-device editing of Unicode-based metadata database, streaming of multiple media formats, remote file management, pluggable backend storage drivers, thin and native clients.
- Responsibilities: worked with management to define requirements, designed an offline-tolerant synchronization scheme and a JSON-based protocol encoding over HTTP. Built NetScaler-friendly Erlang server, centralized user management in MySQL, distributed user data in sqlite3 on Riak cluster, implemented OAuth-based clients for Facebook and Dropbox, wrote automated unit test suite and documentation, worked with ops, monitored the mailing list, directly supported developers of no fewer than 5 different clients – Windows/C++, Android/Java, OS X and 2 Javascript implementations supporting IE, Chrome, Firefox, Safari, Opera, iOS, Samsung's Maple. In-house storage cluster lacked test suite so I wrote one after discovering corruption. Contributed upstream patches to erlang-sqlite3, erlang-uuid and helped cowboy's author with multipart support.
- Tools: SSH, vim, git, Linux, Erlang, HTTP, JSON, curl, bash, cc, OAuth, unicode

Consulting

Jun 2011 – Sep 2011

Turner Broadcasting, New York, NY

- Developed Twitter tracking/reporting to follow network-related handles, discussion and geographical distribution using Linux, PHP, Javascript and [Highcharts](#) JS graphing library
- Performance tuning with [Sergey Chernyshev](#) of the [NY Web Performance Group](#): automated perceptual tuning of JPEGs (github.com/rflynn/imgmin), optimization and minimization of CSS (github.com/rflynn/css-tools)

Consulting

Nov 2009 – May 2011

Norwalk, CT

- MySQL-based e-commerce systems analysis. Process-based parallel refactoring and scheduling optimization decreased database contention; increased system reliability and throughput 10x. — Hyborian Solutions, Las Vegas, NV
- Custom ngram-based probabilistic text corrector in Python and C.

Software Engineer

Nov 2004 – Oct 2009

Cardiopulmonary Corp., Milford, CT

- TCP/IP server gateway software and modular plugin/driver architecture in ISO C.
- Maintained, created protocol drivers for dozens of medical devices in C and SQL.
- Linux/C/embedded: ported C network server, drivers to embedded MIPS bridge.
- Clock skew detection/correction, tunable waveform display resolution, scheduling algorithms.

Software Engineer

Aug 2003 - Nov 2004

The Selling Source, Las Vegas, NV

- Back-end MySQL/PHP/Perl programming for web application framework powering hundreds of websites. Designed database handling tens of millions of records.

Software Engineer

Sep 1999 - Dec 2002

Consulting

- Backend applications on Linux using MySQL and languages like PHP, Python, Perl.

EXTRA-CURRICULAR ACTIVITIES

imgmin

github.com/rflynn/imgmin

Lossy JPEG/PNG compression framework. Minimizes image sizes for publishing while maintaining perceptual quality.

my blog

parseerror.com

I enjoy creating visualizations: [Dante's Inferno](#), [The Thing](#), [100-Meter World Record Progression](#) and writing about software and other entropy-decreasing activities: [Select * Is Evil](#), [100 Games of Pong](#)

EDUCATION

Western Connecticut State University 2002

University of North Carolina 1998-1999