

Alex Riedler

BACKEND POLYGLOT DEVELOPER

Toronto, ON, Canada

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Experience

Influitive Inc

Toronto

SENIOR SOFTWARE DEVELOPER

July 2017 - Feb 2018

- Worked on Hanami (**Ruby**) based micro-services for chat and discussions
- Maintenance and Product support of Existing **Rails** monolith
- Performance optimization of **Sidekiq** jobs over 30 percent improvements of overall job throughput using same hardware
- **Postgres** Lock contention investigation and cleanup
- Involved in architecture discussions around **event based systems**

VarageSale

Toronto

SENIOR SOFTWARE DEVELOPER

Sept 2014 - June 2017

Features

- Several large refactorings of Feed, Search, and User Permissions, including core business models and relationships
- Rebuild **Notifications** System as a service (serves over 10 million notifications a day)
- Consolidate Products from over 300k categories to ~1,000 categories using feature detection and classification techniques
- Avatar Service written in **Elixir** to support both Facebook and Custom User Avatars (High Throughput, over 70K RPM per box)
- Analytics Integration with Third Parties (MixPanel, Amplitude, Google, Segment) on Front-end and Back-end
- Analytics pipeline for user events and attribution analysis using **Kafka**, Secor, Google DataFlow, Google BigQuery

Optimization

- N+1 Queries, Fetch Patterns, Caching (**Memcached** + Memory), Repeated Queries, Unnecessary Queries, Lock Contention
- Improve **ElasticSearch** Index for improved search and scalability (over 40% CPU reduction; resulting in less machines)

DevOps

- Write **Ansible** Playbooks for provisioning production systems
- **Dockerize Ruby** on Rails monolith for local development
- System Tweaking for decreased SSL Handshake times, improved loadbalancer latency, tcp keep-alive, and others
- Reduce **JavaScript** Compilation times from 3.5 minutes to less than one minute
- Discover and Patch Security Holes for PCI compliance; correct CSRF protection
- Diagnose various performance bottlenecks: **MySQL** indices missing, long running transactions, deadlocks, **Redis** contention
- Increase monitoring using Telegraf+InfluxDB+Grafana

Willet Inc / SecondFunnel

Vancouver

FULL-STACK DEVELOPER

August 2013 - Sept 2014

- Worked on core landing pages product
- Designed unique solutions for varying customer needs
- Used gulp.js to build a more dynamic and fluid development cycle for front-end **JavaScript**
- Setup a full deployment and provision architecture in **Ansible** for **AWS**

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Toronto

BACKEND ENGINEER

Sept 2012 - June 2013

- Built a recommendation engine for photos based on user segmentation using **Python** and **GenSim**
- Security analysis and patching of main application (XSS, CSRF, **SQL** Injection)
- Built portfolios product from the ground up, including front-end JS and backend **Ruby on Rails**

Avvasi Inc

Waterloo

DESIGN ENGINEER

May 2010 - Aug 2010, Jan 2011 - Dec 2011

- Researched and developed high-speed logging and packet capture infrastructure (**C++**).
- Media identification and extraction code for fragmented MPEG-4 (**C++**)
- Silverlight Smooth Streaming identification and analysis for key QoS product (**C++**)
- Implemented basis for high-speed database services on OSGi run-time platform (**Java**)
- Code generation for data schema synchronization across multiple languages (**Python,SQL,C++**)

Education

University of Waterloo

Canada

BACHELORS OF COMPUTER SCIENCE

- The big three computer sciences courses: Computer Graphics, Compiler Construction, and Real-time Programming.
- Particular interest in combinatorial optimization, graph theory, economics, and physics.