Alexander Moore-Niemi

Software Engineer

▬▬▬▬ Professional Experience

2016 –   **Software Developer**, Raizlabs, Boston.
Building web APIs from scratch to serve custom built mobile apps.

2016   Increased test coverage of Node.js web API for DrinkLess app while implementing features such as comments. Comments implemented without using Sequelize's polymorphic relations.

2016   Increased performance while reducing LOC on key indexing actions in Ruby on Rails web API for Pexi app project: from 800ms down to 250 ms. Check out my blog post "Refactoring away from statements in Ruby" for a similar piece of refactoring that's open sourced.

2014 – 2016   **Software Engineer**, Zipcar, Boston.
Focus on mobile-first API design, research in hypermedia and REST. On call and release engineer.

2016   "workerbee" project: A JRuby gem wrapping a Java microservices framework (using RabbitMQ as ESB). Included a cli tool that made it extremely easy for devs to create and deploy new services that ran in Java, with a Java framework, but were written from the dev's perspective entirely in Ruby..

2016   "Fleet API" project: An experimental API design exposing views rather than models. A surprising success that allowed both mobile and web frontends. I'm not convinced of it necessarily, but ask me about it—it's a unique case study.

2016   "New platform" project: SOA implementation of microservices on Java/Go PaaS via contributions to core inhouse framework and individual services. Authored a User service and an i18n service (based on gettext), both in Java.

2015   "Instant Drive" project: adding a new service and rebuilding parts of the core platform to support unlocking vehicles from our mobile phone app. Some work with Cassandra NoSQL, which taught me how not to use Cassandra.

2015   "Core API" project: transition away from shared models via gem to an ActiveResource-like pattern, loosening coupling to database. Preparatory work on monolithic architecture for decomposition into services. Our goal was to improve CI experience for devs, and we succeeded.

2014   "Pooling" project: extending "fleetsharing" with Avis cars while also improving vehicle availability. Required extensive redesign of original Zipcar data model, and was implemented as a Ruby on Rails API. A great example of tradeoffs in building a service instead of adding to a monolith.

#304, 804 Centre St – Jamaica Plain MA 02130
℘ (617) 833 7604 • ✉ moore.niemi@gmail.com
http://mooreniemi.github.io/

2013 – 2014	**Junior Software Engineer**, PROMOBOXX, Boston.
	Development on front end and back end services in Ruby on Rails and Javascript integration.
2012 – 2013	**Marketing Automation**, WORLDONE INTERACTIVE, Boston.
	Scripting and data analysis for the marketing team.
2012	Used R for NLP to identify discussions in need of moderation. Patented use of NLP to identify physician discussions about pharmaceutical treatments.

Open Source

graph_function	a Ruby gem to generate graphs of asymptotic performance
array_collapse	a Ruby C extension to add Array#collapse, a method that allows blocks to be passed in to flatten
proc_compose	a Ruby C extension to add Proc#compose (until it is added to Ruby core, which is on its way), a method for composing procs so that they can be passed in as a single block to any mapping operation
figtree	a Ruby gem for parsing ini_files using parslet DSL

Keywords

Fluent in	Ruby
Proficient in	Java, Groovy, Javascript, Haskell
Learning	Go, C
Frameworks	Rails, Grails, Sinatra, Node.js, Ember, Backbone, Yesod
Practices	TDD, SOA, Pair programming, Functional programming, Kanban, Scrum, Agile

Volunteering

2012 – Now	**Transbucket.com**, *Web Developer*, Migrated site from PHP to Ruby on Rails and implemented many new features. The premiere site for transgender surgery photos, with 90k users (1k active uniques per month).

Publications

2016	**Developer Testing: Building Quality into Software**, *Addison-Wesley Signature Series*, A sidebar on how to think about types as a way of extending design by contract.

Education

2012	**Certificate: Computation and Algorithms**, *MIT*, Boston.
2004–2009	**BFA Media Production**, *Emerson College*, Boston, Graduated with honors.