

# Allele Dev

**November 29, 2017**

- Email: allele.dev [AT] gmail.com
- Location: Portland, OR, USA
- Code:
  - Link: [gitlab](#)
  - Link: [github](#)

## Summary

I'm a software developer who prioritizes communication, correctness, and maintenance. Let's build infrastructure and systems that we can trust and depend on, that makes people's lives better.

## Hiring Me

I'm looking for full-time positions. Remote preferred, but local on-site is acceptable.

## Skills

### At a Glance

Language	Experience (years)
Haskell	4.5
C++	4
C	4
Bash	2.5
Python	2
Java	1.5
Scala	1.5
Ruby	0.5

Main Tools	Experience (years)
Linux	~10
emacs	8
git	6
postgresql	2
mysql	1
mongodb	1.5
redis	1.5
elastic search	0.5

### Details

I've done development primarily on linux machines over the past decade, with a focus on backend systems, type systems, and programming language theory.

I'm comfortable in a command line environment. Deployment, system administration and monitoring, and general automation are all areas I'm familiar with.

I'm flexible in adopting different technology. I'll make the most of carrying over what I already know, to make the best of things in a new environment.

## Work History

### At a Glance

- **Simple**, Scala/Ruby/Haskell/SQL, remote, backend systems (2017)
- **American Express**, Java/Bash, remote, backend systems (2016)
- **Queertypes**, various, founder/contractor (2015 Q4 - 2016 Q1)
- **Eduphoria**, Haskell/Bash/C#, 80% remote, backend systems (2015 Q1 - 2015 Q3)
- **Rackspace**, C/C++/Python, backend systems (2012 Q3 - 2014 Q4)

### **Simple, Nov. 2016 - Nov. 2017, Backend Engineer**

I was a core part of the tools and services team. My responsibilities included:

- participating in vendor selection processes
- integrating third party systems with Simple's infrastructure
- building new tools to facilitate future development
- the maintenance and decommissioning of legacy tools without business interruption
- communication with product teams to ensure we're building and fixing the right things
- participating in oncall rotations to ensure incidents were well-handled
- performing database migrations to aid with changing requirements
- code archaeology; documenting older decisions to secure current developments
- frequent code review
- helping the team learn how to best leverage typed-design and functional programming in Scala

### **American Express, Feb. 2016 - Oct. 2016, Software Engineer**

I was part of a team helping to develop the backend systems for the mobile app. This involved everything listed below.

- Communicating with products to refine requirements
- Communicating with QA to ensure components are well-tested
- Managing deployments
- Extending and debugging the mobile services layer
- Documenting existing systems to make them easier to maintain
- Helping with API design
- Java, Bash

### **Queer Types, Oct. 2015 - Feb. 2016, Founder**

I was a contractor for a short while. My goal was to do as much free software work as possible given limited funding.

- Haskell web development book campaign
- Small Haskell projects

### **Eduphoria, Feb. 2015 - October 2015, Sr. Software Developer**

I worked in backend systems development using Haskell. This includes:

- API design
- Automated testing
- Application-level monitoring and logging
- Systems integration

### **Independent, Dec 2014 - Feb. 2015, Software Consultant**

I specialized in typed-FP and web development. Available to clients on a contract or full-time basis.

Below is a list of projects I've worked on during this time:

- Internet Message Parser (RFC 5322): [src](#)
- Simple language interpreter: [src](#)

### **Rackspace, May 2014 - Dec 2014, Software Developer**

I was tasked with the development of tools and services to aid in the automation of infrastructure. A sampling of tasks I've contributed to thus far include:

- Log analysis using Haskell/attoparsec
- IP Address querying service using Haskell/Yesod/MySQL
- DNS event processing system using Haskell/Scotty/ElasticSearch
- Network device automation service using Scala/Spray/Finagle

I wrote the following articles in an effort to learn and advocate:

- [Comparing Haskell, Scala, and Go](#)
- [Finding Issues in Scala With Wart Remover](#)

I also lead a company-wide functional programming advocacy groups, encouraging colleagues to share use cases, challenges, techniques, and libraries arising from the use of FP.

## **Rackspace, September 2012 - May 2014, Software Developer**

I aided in the development and maintenance of two products over this time.

First, I was tasked with the maintenance and extension of a c++ backup agent. This involved improving testing as well as solving existing issues.

In the latter role, I served as a core member of the Openstack Marconi (now Zaqar) project. Zaqar is a distributed message bus service written primarily in Python. I was responsible for feature development, code review, design, and testing on both client and server side. I served as the project Python 2/3 compatibility expert.

Internally, I was tasked with maintaining/extending an internal deployment of Openstack Zaqar. This involved new development effort to integrate the deployment into Rackspace's event processing systems.

I started and led an office-wide tech talk group to encourage colleagues to present on interesting tools, techniques, and technologies.

## Education

### Florida State University: MS. CS. 2012

I focused on algorithms, operating system design, and high-performance computing. Understanding efficient computation was my goal while studying at the university, and as a result, was exposed to:

- GPU computing (CUDA, OpenCL, algorithms)
- Computational geometry
- Parallel network flows
- Cache-oblivious algorithms
- File system design and implementation
- Statistical methods for designing performance experiments

## Speaking

- OSCON 2014: [Ask More of Your Languages](#)

## Volunteering

### Google Summer of Code 2014, Openstack Zaqar

I mentored two wonderful students!

- Victoria M. de la Cruz: worked on AMQP backend for Zaqar
- Prashanth Raghu: worked on Redis backend for Zaqar

### Gnome OPW 2014, Openstack Zaqar

I mentored Nataliia Uvarova as she worked on achieving full Python 3 compatibility for the Zaqar project.

## Additional Links

- [Blog](#)
- [LinkedIn](#)
- [Twitter](#)