## Jacob Chae

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### Education

**2010-2015** Bachelor of Arts, Computer Science; Oberlin College

Bachelor of Music, Oboe Performance; Oberlin Conservatory

## Summary

I am a Rails developer with 4 years of experience, including experience with MySQL, Javascript, CSS and React.

I actively advocate using Object Oriented Design principles to make code cleaner and more extensible while also drawing inspiration from functional languages like Elixir and Haskell. I also have experience working on performance improvements and especially enjoy working on improving slow database queries.

Most of my side projects are small kata exercises in various languages. I typically use exercism io or go over Advent of Code exercises to explore new ways to approach problems.

### Experience

#### 5/2018-Present Reallyenglish

Skills used: Ruby on Rails, HTML, CSS, Javascript, PostgreSQL, Google Cloud Platform and Kubernetes

Role overview: Helped lead development of the new version of the Reallyenglish management system. Worked with other teams in the company to coordinate development of new features as well as working to improve performance of key parts of the application.

*Interesting challenges:* Certain parts of the application were initially implemented in an inefficient manner to allow for quicker prototyping. As we have begun onboarding new customers onto the new version of the application we have started to explore ways to improve the performance of this system by looking to best practices in Ruby, Rails and database design.

#### 6/2015-4/2018 Mobile Defense/Assurant Inc.

#### Mobile Defense was acquired by Assurant in May of 2016.

Skills used: Ruby on Rails, HTML, CSS, Javascript, React, Sinatra, MySQL, PostgreSQL and Ansible Role overview: Helped develop and maintain API endpoints for the Pocket Geek suite of applications.

Built out new services to help integrate our applications with new clients.

*Interesting challenges:* The database started with very few indexes or foreign key constraints. As the database grew, we had increasing problems with slow performance and inconsistent data. We researched and implemented best practices in database design to solve these problems.

# 9/2014-5/2015 Student System Administrator, Oberlin Center for Technologically Enhanced Teaching:

Skills used: Bash scripting, virtualization, Ruby

Role overview: Helped maintain existing servers. Wrote software to make their use more efficient and effective through the automation of common tasks with scripts. Created new VMs to test new software and environments (multiple Unix-based systems):

Interesting challenges: Created scripts to automate common processes on all Unix machines in a computer lab.

# 2/2013-5/2015 Software Developer and ID Card Programmer, Oberlin College Office of Residential Education:

Skills used: Ruby, Sinatra, HTML, CSS, Bash scripting, Elixir

*Role overview:* Developed software for the Residential Education Office. Wrote programs to parse documents to get statistics on student, faculty and staff ID card usage, integrating this information into web-based applications.

## Open Source

Github: https://github.com/jbcden

**Gem Checks:** Author of the **gem\_checks** gem. This gem scrapes **Gemnasium's** website and parses a provided Gemfile.lock to determine if there are any vulnerable Ruby gems being used in your projects.

**Rustdoc:** Contributor to the ongoing rewrite of the Rustdoc tool led by Steve Klabnik.

**Other Projects:** I am the maintainer of the dexter PokeApi client written in Elixir. I took over maintaining from the original author in early 2017.

Basic knowledge of C, Java, Scheme, Elixir, Android, Swift, Haskell and Rust