

**Sean Irby**

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*I'm an electrical engineer turned web developer that's experienced within the entire web development stack. My main proficiencies are **Ruby on Rails** for back-end work and **Javascript, jQuery, and Bootstrap** on the front-end. I want to apply my experience and learn from great people.*

**Projects** - <https://github.com/seanirby>

Graphical Resistance Calculator - <https://graph-res.herokuapp.com>

July 2013

- I created this project to further develop my understanding of HTML, CSS, and Javascript. It is a tool for electronics hobbyists that calculates the value of a given resistor based on its bands. There are many widgets online that do this but I wanted one with a simple and pretty user interface.

Partner Dashboard - <https://codefellows-partners.herokuapp.com>

June 2013

(Login with email: [example@example.com](mailto:example@example.com) and password: 'password' )

- I created the Partner Dashboard to help business partners of the Code Fellows bootcamp connect with and hire graduates of the program. Once signed up, a partner can browse students based on skill and employment status using a filter based search and request connection with students of interest. Once the connection is approved by an admin, the partner will have view access to the student's full profile and contact information.
- In addition to the functionality above, the app includes invitation based sign-up, admin management tasks, native-app like experience using AJAX, and front-end styling using Bootstrap.
- Technologies used include Ruby, Rails, Bootstrap, RSpec, HTML, CSS, JavaScript, jQuery, Git, and Pivotal Tracker.

Music Gear Scraper - [https://github.com/seanirby/gear\\_scraper.git](https://github.com/seanirby/gear_scraper.git)

Jan 2013

- I needed a way to cover my living expenses while changing careers to web development and since I love repairing vintage, analog music equipment I decided to create a tool that would automatically search for nearby broken equipment that I could buy, fix, and sell.
- The Music Gear Scraper is a Ruby script that searches all relevant Craigslist feeds every 15 minutes for broken equipment. Timing is everything when it comes to deals on Craigslist so once a hit is found I immediately receive an email with the post information so I can always be the first to respond.
- With the help of the scraper, daily advertisements, and word of mouth, I have been able to successfully cover my living expenses and only work ~15 hours per week since January 2013.

## **Work Experience**

Electrical Engineer at Army Corps of Engineers(Seattle District)

2010-2012

- The Seattle Army Corps of Engineers is the engineering branch of the U.S. Army that focuses on building design at Ft. Lewis and civil works projects throughout the northwest at Army owned locks and dams.

- As a civil servant with the COE, I was responsible for designing and drafting the electric power and lighting systems for new facilities. My major contributions while there include the lighting system design for a 50k sq. ft maintenance facility, the power system design for a 20k sq. ft office building, and a complete electrical design for a prototype fish passage at Albeni Falls Dam. All of my building designs met or exceeded the LEED Silver rating for sustainable buildings.
- Reviewed in-house and contractor submitted designs for correctness, consistency, and adherence to Army standards and national building codes.
- I was the resident expert in the modern building design tool Revit and I was responsible for transitioning the electrical engineering team to this program from our outdated design tool, Bentley Microstation. Revit offered many tools for streamlining the design process. For instance, before Revit we had to dedicate approximately 2 hours to the printout of a design package. After I trained the team, we could do it in 10 minutes.

QA Engineering Intern at Siemon Company (Watertown, CT)

Summer 2009

- Responsible for migrating all of the company's 1000+ model and drawing files from an AutoCAD based version control system to a Solidworks based system.
- Ensured that each model file was free from corruption after the conversion process was completed.

Undergraduate Researcher at University of Minnesota

Summer 2008

- Selected to attend the National Science Foundation's "Research Experience for Undergraduates" program at the University of Minnesota.
- Spent the summer researching Digital Signal Processing techniques in order to improve the accuracy of an autistic behavior detection algorithm written in MATLAB by a team of post-graduates.
- By the end of the summer, I had improved the accuracy of the algorithm by approximately 5%.

## Education

Code Fellows: Ruby on Rails Bootcamp

June 2013

- I was one of 14 out of 400 applicants selected to attend the second Code Fellows bootcamp. Code Fellows is designed to train engineers in Ruby on Rails and the technologies it leverages including Javascript, SQL, HTML, CSS, and jQuery.
- For two months, I spent 8 hours every Monday through Friday participating in instructor led lectures and coding practice. Following this, there were several assignments to complete each night including 'App-A-Day' assignments which were micro-applications meant to showcase specific features of Rails. See github repositories with 'cf-' prefix.

University of Hartford

Bachelor of Science in Electrical Engineering

Sep 2009

- Graduated with a GPA of 3.71 and Magna Cum Laude Honors.
- Worked as a Physics Lab Instructor during my Junior and Senior year.