

## Diane Douglas

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### SUMMARY

Hardworking, creative senior software engineer specializing in web development and music technology.

### EXPERIENCE

#### Senior Developer, Thrive Commerce LLC

Feb '20 – Present

- + I build features for the Thrive SaaS platform, coding with a careful eye to fast and error-free performance in Ruby on Rails. I also implement front end designs from Figma using JavaScript and SCSS. I work closely with managers defining project scope and I communicate directly with clients when a technical voice is needed. I also train new hires and pair program with other teammates to solve complex problems quickly.

##### *Most Recent Accomplishments:*

- + Optimized database queries in our delivery system to cut page load time by an average of 61% for one of our products. I found the bottleneck, drafted the project proposal and implemented it.
- + Added features to work in tandem with our AI algorithm, including one which lets clients define targeting rules to only display products to certain users using session data. I architected it for scalability, allowing for multiple rules per product in the future. When we did expand in this direction, my prototype saved weeks of development time.
- + I was in charge of upgrading all apps to Rails 8 and deciding which of the newest tools were best suited to our needs. I also wrote documentation for all changes and gave a presentation to bring the rest of the team up to speed.

#### Lead Ruby on Rails Developer, Brand Value Accelerator

April '19 – Feb '20

- + Full Stack Tech Lead on multiple E-commerce sites using Ruby on Rails. Also became a Shopify Certified Developer and wrote a small library of custom discount scripts in Ruby for multiple Shopify clients.

#### Lead Ruby on Rails Developer, Weblinc

March '17 – April '19

- + Full Stack Tech Lead for multiple E-commerce clients including Sanrio, Olympia Sports, Do It Best, and PBS Animal Health. Contributed to 12+ other sites, all using Ruby on Rails. Built new features, ran production deploys, mentored junior devs, communicated with clients about technical issues, and analyzed the scope of new issues.
- + Part of a large developer team following Agile/SCRUM methodology with strenuous code reviews, hourly client billing and emphasis on both working independently and helping each other whenever needed.

#### Curriculum Developer and Teacher, Epicodus, Treehouse

Nov '14 – Feb '17

- + Taught and wrote the curriculum for the school's first PHP / JavaScript / Drupal class. Also created a Drupal video course for Team Treehouse. Fine-tuned the Ruby curriculum to include more focus on unit testing and expanded the JavaScript curriculum to include Angular and projects using external APIs such as the GitHub API and Google Maps.

#### Music Software Engineer, Keith McMillen Instruments

Jan '10 – Jan '14

- + Developed cross-platform software applications in C++ with the QT environment for ground-breaking MIDI controllers using firmware written in C. Worked with all levels of interface design and implementation, including prototyping the UI and DSP algorithms as well as beta-testing and debugging the editors. Also created cross-platform software installers for all products.

## EDUCATION

### **Berklee College of Music.**

**2005-2009**

Bachelor of Music Technology. Emphasis on: Music Software, Music Production, Sound Design, DSP.

### **Stanford University CCRMA, University of California Berkeley.**

**2009**

Audited graduate courses: "Human Controller Interface Theory", "Advanced Projects in Computer Music".

### **Epicodus.**

**2014**

Coding bootcamp with emphasis on Test Driven Development & Pair Programming.

## SKILLS

**Languages:** Ruby, Ruby on Rails, PHP, C++, C, JavaScript, jQuery, CSS, SASS, SCSS, Python, Max/MSP, CSound, Elasticsearch, GraphQL.

**Frameworks:** QT (C++), Drupal, Workarea E-commerce Platform, Wordpress, Angular, Ember, Shopify, Big Commerce.

**Testing:** RSpec, Capybara, MiniTest, PHPUnit, Simpletest (Drupal).

**Databases:** SQL, ActiveRecord, Firebase, MongoDB.

**Infrastructure:** Docker, Kubernetes, Bamboo, AWS Opsworks, Heroku, Sentry, New Relic, Airbrake, Data Dog.

**3rd Party APIs:** Paypal, World Pay, Adyen, Stripe (payment gateways), Kount (fraud detection), Avatax (tax calculation), Google Maps, Facebook tracking pixel, Google Product Feed, Google Analytics, Google Charts.

## WORK EXAMPLES

### **Freelance Web Development:**

+ **Contract work through WeSpeakEasy agency, Philadelphia:**

- [LBBC.org](http://LBBC.org) *Drupal version update for legacy website, front end content display features, back end bug fixes.*
- [wisdomplanning.com/how-we-work-together/#priority-planner](http://wisdomplanning.com/how-we-work-together/#priority-planner) *Improved jQuery drag&drop interface.*

+ **E-Commerce Websites while self-employed, Portland:**

- <https://www.inhomemusicteachers.com/> *Created a responsive calendar system with employee task tracker*
- [FitHQ](#) *Built a complete PCI compliant E-commerce website with a variable rate recurring billing / calendar system*

### **Audio Programming Work:**

- + **Pendulum Shaper:** Audio waveshaper plugin written in C++. It distorts an input signal with an algorithm based on the motion of a double pendulum. Prototyped physics engine in JavaScript with P5.js
- + **Collaborated with Max Mathews on Music Software Development:** Worked on a music performance instrument in C, co-authored a paper, added features & ported it to Max/MSP.
- + **MIDI Tenderizer:** Created a plugin for Ableton Live that allows users to intelligently humanize their music.
- + **Impossible Shapes:** Musical effect that creates infinite semi-random looping out of any input signal.
- + **The Silver Machine:** A musical instrument that can be played with a Playstation controller.