github.com/thischrisblack JavaScript, TypeScript, HTML, CSS

EXPERIENCE

Software Developer, The American Board of Radiology

October 2019 - present

- Primary focus: an exam creation web app, featuring complex forms, in-browser image editing, and item status tracking through a multi-phase, multi-role review process.
- Build new features and full workflows from mockups or written requirements.
- Collaborate with leadership, UX designers, dev teammates, Quality Assurance engineers, and staff (users) through each phase of the development process.
- Convert tacit knowledge to documentation in the company wiki, including:
 - Overview of user roles and how they are modeled in the database
 - User workflow guide covering each UI component's expected behavior
 - Instructions for setting environmental variables in deployed environments
 - Handy SQL queries for common tasks
- Reduced source code by 1.2% in a merge yielding 81 insertions, 2,436 deletions by simplifying application state structure and eliminating dead code.
- Reduced dashboard load time by 28 seconds (95%) by optimizing an API endpoint to return 57KB instead of 15MB for the same view.

TECH: TypeScript, Aurelia (a frontend framework), Node.js, C#, SQL, HTML, CSS

Software Developer, Bookkeeper, Chicago Music Store

December 2008 - October 2019

Built in-house and public-facing applications which:

- Introduced online musical instrument rentals, now 20% of total rental business.
- Streamlined and automated sheet music ordering and delivery tracking.
 - Each order typically shipped hundreds of pieces to dozens of locations state-wide
 - o Reduced per-order research/data entry time from 4+ hours to 20 minutes (92%)
 - Created online dashboard offering clients detailed per-piece order status
 - Reduction in errors and fulfillment time won back lost account worth \$30,000/year
- Simplified and automated delinquent account collection process.
 - Enabled complete round of account contacts to be made once per day rather than once per week (80% improvement)
 - Created dashboard tracking numerous collection metrics: calls per day, dollars recovered per call, delinquency change over time, etc.
- Moved the workflow for collaborative event organization from several shared Excel sheets to a centralized app, reducing errors, lost data, and miscommunications.
- Created detailed and sometimes interactive documentation for each new tool or workflow.

TECH: PHP, WordPress, JavaScript, HTML, CSS, SQL

SELECTED PROJECTS

Emoji Disco

https://github.com/thischrisblack/emoji-disco

• An experiment with the Web Audio API. Upon uploading a music file, the decibel levels of selected frequency bands animate the dancers, lights, DJ, turntables, and speakers.

TECH: JavaScript, Web Audio API, HTML, CSS

Vexations

https://github.com/thischrisblack/vexations

• A web page to help play Erik Satie's "Vexations" 840 times in a row. Select your tempo, click BEGIN, and play along with the scrolling music.

TECH: JavaScript, HTML, CSS

Glengarry Bob Ross

https://github.com/thischrisblack/glenngary-bob-ross

• A Twitterbot tweeting dynamically-generated images of painter Bob Ross subtitled with lines from the "always be closing" monologue from the film *Glengarry Glen Ross*.

TECH: JavaScript, Node.js, JIMP, Heroku

LEADERSHIP

Founder and Artistic Director, ChamberLab, Tucson, AZ

2010 - 2017

- Founded non-profit alt-classical chamber music concert series.
- Organized 20 performances in venues including rock clubs and movie theaters.
- Recruited and collaborated with over 100 composers and performers.
- Organized a 16-hour performance marathon, raising \$17,000 for the ACLU of Arizona.
 - Created online hub for performers and sponsors to register and make pledges of support, using PHP and MySQL.
 - Created big-screen sheet music display operated by a pianist with a USB switch, using JavaScript, HTML, and CSS.