



PROJECTS

iRetain (Ruby on Rails, React.js, Redux) | *Sole Developer*

[live](#) | [github](#)

Web app that allows users to create and study decks of topical flashcards

- Designed and implemented browser-like tab UI from scratch using HTML5 and Sass
- Implemented auto-lookup feature that utilizes Pearson dictionary API to create flashcards
- Augmented app with Chrome extension, allowing cross-domain creation of flashcards while browsing

Transit PathFinder (JS, jQuery, CSS, HTML5 Canvas) | *Sole Developer*

[live](#) | [github](#)

Web app that allows visualization of search algorithms using transit maps

- Integrated app with transit authority APIs to pull real time data on subway systems
- Animation and styling done solely in HTML5 and CSS (no external libraries)

LiteRail (Ruby, SQLite3) | *Sole Developer*

[github](#)

A lite version of Ruby on Rails framework with ActiveRecord, both built from scratch

- Created object relational mapping to connect user to database without the need to write SQL queries
- Complimented design with single-command-generation of models and controllers from terminal
- Designed dynamic error handling with code snippets and stack trace displayed in browser

Hemoglobe (Plethysmography, Android OS, Embedded Systems) | *PM and Engineer*

[demo](#)

Non-invasive anemia detection using pulse-oximeter-like device and mobile app

- Designed and implemented filtering and sampling algorithms for PIC microprocessor
- Oversaw development and transfer from academic setting to licensing by multi-national corporation

LANGUAGES AND TECHNOLOGIES

Python	Ruby	CSS/Sass	JS	jQuery	SQL	HTML
Rails	React.js	Redux	Git	Matlab	RSpec	Mocha

EDUCATION

App Academy

2016

San Francisco, CA

Johns Hopkins University

2013-2014

Baltimore, MD

M.S.E. in Bioengineering, GPA: 3.9

Development and commercialization of med-tech

University of West Florida

2009-2013

Pensacola, FL

B.S. in Electrical Engineering, GPA: 3.8

Minor in mathematics, focus in pattern recognition

EMPLOYMENT

CEO, Cofounder

Glyscend, Inc.

2014 - 2016

Life science startup developing novel treatment for type 2 diabetes

- Led diverse team of engineers, clinicians, and scientists from clinical need discovery and napkin sketch through seed funding and preclinical development in 2 year period
- Raised and managed a non-dilutive seed round of over \$1M from various sources

Project Manager/Engineer

Johns Hopkins University

2014 - 2015

Managed IP-generating projects' transfer out of academic setting

- Coordinated teams of engineers and clinicians on a variety of engineering projects
- Co-authored several patents that were eventually licensed by major multinational corporations

Research Engineer

University of West Florida

2012 - 2013

Used movement data (actigraphy signals) to classify user activity and estimate energy expenditure

- Used Matlab to implement various machine learning algorithms to evaluate and accurately rank the effectiveness of 63 different features in classifying exercise behavior
 - Presented results at IEEE Southeast Con 2013 in Jacksonville, FL
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