

# Wyatt Rudnicki

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**SKILLS** Ruby, Rails, JavaScript, React, CSS3, Node, Python, Redux, SQL, MongoDB, HTML5, Git, C, Java, TDD

## EDUCATION

**University of California at Berkeley, 2016**

BA Education - Cognitive Science, Computer Science minor

Coursework : Intro to Artificial Intelligence, Efficient Algorithms and Intractable problems, Intro to Security, Intro to Database Systems, Quantitative Methods in Linguistics, Perception, Cognitive Neuroscience

## EXPERIENCE

**Whitney Lab - Vision Science**

Research Assistant

Oct 2016 - Apr 2017

- Built templates for online visual experiments using JavaScript, which provided 15+ new experiments to run, led to over 100% growth in sample sizes for current experiments, and increased quality in experiments and data
- Improved UX of online experiments through smooth JavaScript setTimeout transitions

## PROJECTS

**Brainhacker** (Ruby on Rails, React) | Sole Developer

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

An EdTech online platform for creating and studying flashcards

- Implemented user authentication using Ruby on Rails with BCrypt to secure user passwords and profiles
- Built multiple full React-redux cycles for managing flashcards using React Router and authorized/protected Routes to direct users to the appropriate location on interaction
- Used custom Active Record queries and routes to efficiently build out both a search feature for decks and a live updating study progress bar
- Revamped website style for cross browser compatibility and mobile responsiveness using media queries.

**Meios** (JavaScript) | Sole Developer

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

A game based off Agar.io where you can eat food, grow, divide, and conquer (eat) other competing cells

- Rendered cells with unique behaviors using HTML5 Canvas, JavaScript asynchronous functions, and OOP
- Implemented algorithms for circle collision detection and boundary detection, giving smooth speed transitions while keeping elements on the Canvas
- Created enemy AI units which respond to player movements through decision making heuristics and frequency of callbacks to create a fun and challenging UX
- Improved user relations by building in a support feature

**Roommez** (MERN stack) | Full Stack Developer

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

A roommate finder app which filters based on interests and deal breakers

- Spearheaded Facebook OAuth and MongoDB back end setup using Passport and Mongoose
- Built out back end routes for group Components using Express which facilitated the creation of the front end group showpages
- Implemented form submission using bodyParser, accurately integrating user interests and deal breakers with pseudo random React keys

## OTHER EXPERIENCE

**University of California Marching Band**

UI Designer/TA/Percussion Leader

Sep 2012 - May 2016

- Implemented an onboarding feature for the Cal Band's new members-only website using CSS and HTML
- Ran rehearsals for my section, led the band in performances, planned marching logistics on China/Japan trip