

# DANIEL CHOI

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## SKILLS

Ruby Rails	React Redux	JavaScript PhotoShop	HTML5 CSS3	SQL jQuery	Git RSpec	CompTIA A+ MATLAB	Java R
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## SOLO PROJECTS

**CitySounds** · Ruby on Rails · React · Redux · PostgreSQL [Live](#) · [GitHub](#)

*Full-stack web application for listening to ambient city soundscapes while studying.*

- Renders a custom CSS-styled React audio player component that uses centralized Redux actions to persist audio playback state between views and switch seamlessly between albums & tracks.
- Presents a tabbed interface for uploading audio, artwork, and metadata into an album, then enforces database integrity by saving/updating all data within atomic ActiveRecord transactions.
- Serves audio files, album artwork, and user avatars from Amazon S3 cloud storage over HTTPS.
- Maintains a many-to-many relationship to enable tagging of albums & filtering of albums by tags.

**Atari Tempest Lite** · JavaScript · Canvas · Vanilla DOM [Live](#) · [GitHub](#)

*Retro browser game inspired by Tempest, the 1981 arcade game by Atari.*

- Scales and rotates vectors in real time to map enemy polygons onto a three-dimensional surface.
- Ensures smooth user interaction by using separate down/up listeners for keypress & click events, moving the player along the shortest path to a target, and integrating the Microsoft Surface Dial.
- Progressively increases the difficulty level by adjusting enemy attributes on a logarithmic scale.

**SneakySQL** · Ruby · SQLite3 [GitHub](#)

*Object-relational mapping tool for translating SQLite3 entries to Ruby objects.*

- Intelligently creates, updates, and deletes database entries via an object-oriented user interface.

## EDUCATION

**App Academy** New York, NY

*Rigorous full-stack web development bootcamp with 3% acceptance rate* Feb 2017 – May 2017

**Cornell University, College of Arts and Sciences** Ithaca, NY

*B.A. in Biological Sciences; Concentration in Computational Biology* Aug 2010 – May 2014

- Cumulative GPA: 3.771
- Relevant Coursework:
  - Intro to Computing Using MATLAB
  - Object-Oriented Programming & Data Structures
  - Linear Algebra with Applications
  - Discrete Structures

## WORK HISTORY

**Simply Vietnamese** Tenafly, NJ

*Front of House Staff* Dec 2016 – Feb 2017

- Greeted incoming guests, processed card & cash payments at a POS terminal, and provided friendly customer service at a restaurant voted Best of Bergen for the past six consecutive years.

**NYU Langone Medical Center** New York, NY

*Research Assistant* Oct 2014 – Aug 2016

- Developed, ran, and transcribed protocols for software-controlled calcium imaging experiments, which were consulted by later researchers; abstract accepted at [WIP 2016](#) & pending publication.
- Introduced Excel VBA and AutoHotkey scripts to automate over half of the data analysis process, collectively saving my colleagues 100+ hours of repetitive tasks; acknowledged in [Mol. Pain](#).
- Standardized ADNI clinical data spreadsheets using lookup functions and conditional logic to accelerate statistical analysis; abstract accepted for [IARS 2016](#) conference & pending publication.