

# Peter Hua

515 West 52<sup>nd</sup> St. Apt. 18C, New York, NY 10019

317-331-3052 (C) [peteryhua@gmail.com](mailto:peteryhua@gmail.com)

[Github](#) [LinkedIn](#) [Portfolio](#)

## PROJECTS

### Traksana

[Live](#) | [Github](#)

*Lite version of Asana, popular "teamwork without email" webapp*

- Single-page Backbone app built on RESTful Rails API
- Thorough front-end architecture and nested associations provide dynamic and content-rich UX
- Enlists Ajax calls to fetch search results on keydown and create database entries through many-to-many associations
- Implements file upload via AWS S3 and Facebook login via omniauth API; supports multiple device sign-ins for same user through custom sessions table

### BrickFace

[Live](#) | [Github](#)

*Brick-breaker with face detection*

- Integrates refactored facial recognition library to generate paddle movement from user webcam
- Asynchronous facial detection runs parallel to gameplay in the browser, and passes through custom smoothing functions to eliminate jerky movement and protect against false positives
- Renders on 2 canvas objects, and uses trig functions and vector math to determine escape trajectories

### Cellular Warfare

[Live](#) | [Github](#)

*Part cellular automaton sandbox, part Snake*

- Browser game written in JavaScript; renders every 75ms by re-assigning classes on HTML elements, receives user inputs through jQuery
- Procedural generation of friendly and enemy cells that propagate via modded Game of Life rules
- Increases user responsiveness via command queue and turn preprocessing

### Chess

[Github](#)

*CLI implementation of the classic game written in Ruby*

- Implements multi-level inheritance, modular extension, and other OO best practices
- Computer player takes pieces when possible

## TECHNOLOGIES

Ruby   Javascript   Rails   Backbone.js   jQuery   SQL   Git   HTML   CSS   VBA

## EDUCATION

### App Academy

New York, NY

*Intensive full-stack web dev program, acceptance rate < 5%*

Jul - Oct 2015

### Wharton School, University of Pennsylvania

Philadelphia, PA

*Bachelor of Science in Economics, Finance and Marketing Concentrations*

May 2009 - 2013

- Cumulative GPA: 3.70/4.00, *magna cum laude*
- Honors: Wharton Marketing Establishment EVP, Traders Trophy National Finalist & Top Earner

## EXPERIENCE

### Deutsche Bank

New York, NY

*Trader, Commercial Mortgage-Backed Securities*

May - Aug 2012, Jul 2013 - Jul 2015

- Conducted extensive research to model mortgages for modification/default risk, contributing to over 16% RoE in 2014 between team of 4 traders (#1 across the Street)
- Oversaw \$200 million of commercial mortgage bonds and drove \$750 million of volume in 2014 across 40+ clients (1 of 2 analysts in class of 20+ to manage own portfolio)
- Built system to decompose P&L into line-item drivers and suggest intelligent hedges; provided greater risk transparency and saved 60 minutes of closing time daily across the desk