

# EDWARD HE

(NED)



GitHub



LinkedIn

**Email:** edward.a.he@gmail.com

**Phone:** 646 . 479. 2282

**Address:** 108-35 37th AVE Apt 1F.  
Queens, N.Y. 11368

**Website:** www.edwardhe.com

## PROJECTS

**BrainSTAX** (Rails, React.js/Flux, PostgreSQL)

Live GitHub

*A flashcard study app integrating a custom-built spaced-repetition algorithm.*

- DRYs code with concise views, partials, and mixins.
- Implements modified Leitner SRS algorithm to dynamically re-sequence cards.
- Optimizes runtime queries to reduce load time.

**Coffee Snake** (JavaScript, jQuery, CSS)

Live GitHub

*A browser-based classic Snake game with a 21st century twist.*

- Maximizes principles of DRY object-oriented design.
- Built upon own DOM Manipulation library called Orb.

**Orb** (Ruby, SQL)

GitHub

*A Ruby ORM inspired by ActiveRecord of Ruby on Rails.*

- Leverages Ruby's extensive metaprogramming and SQL to simplify database queries.
- Infers table names by default when making associations between classes.

## SKILLS

**Ruby**   **Rails**   **JavaScript**   **jQuery**   **React.js**   **AJAX**  
**Flux**   **SQL**   **Git**   **HTML5**   **CSS**   **RSpec**   **TDD**   **AWS**

## EXPERIENCE

Volunteer

**ELMHURST HOSPITAL CENTER** | QUEENS, NY

2010 - 2011

BIO-MEDICAL ENGINEERING DEPARTMENT.

2012 - 2013

- Repaired hundreds of hospital equipment and medical devices.
- Managed hospital equipment database to facilitate tracking and organization of hospital equipment.

Research-  
Assistant

**DEPARTMENT OF CHEMISTRY, CSI** | STATEN ISLAND, NY

2013 - 2015

- Co-authored 2 peer-reviewed journal articles in renowned chemistry journals.
- Optimized antimicrobial activity of polymers against E. coli and S. Aureus.

Tutor

**MACAULAY HONORS COLLEGE, CSI** | STATEN ISLAND, NY

2012 - 2013

- Tutored Calculus, Organic Chem., Physics & Chinese to dozens of students.

## PUBLICATIONS

- **Effect of Relative Arrangement of Cationic and Lipophilic Moieties on Hemolytic and Antibacterial Activities of PEGylated Polyacrylates.**

2015

International Journal of Molecular Sciences. *Punia A., He E., Lee K., & Yang N.L.*

- **Cationic amphiphilic non-hemolytic polyacrylates with superior antibacterial activity.**

2014

Chemical Communications. *Punia A., He E., Lee K., Banerjee P., & Yang N.L.*

## EDUCATION

**APP ACADEMY** | NEW YORK, NY

2015

- Rigorous full-stack software engineering curriculum with < 3% acceptance rate.
- Emphasis algorithms, TDD, pair-programming, and efficient design.

**THE MACAULAY HONORS COLLEGE** | NEW YORK, NY

2011 - 2015

- Bachelors of Science [B.S.] in Chemistry & Biochemistry | Minor: Chinese

2015

• *Course Highlights:* Calculus (I, II, & III), Analytical Chemistry, Thermodynamics, Polymer Engineering, Quantum Mechanics, Probability & Statistics,

- *GPA:* 3.87

Awards

Department of Bio-Chemistry Distinguished Student Award recipient

2015

Department of Chemistry Distinguished Student Award recipient

2013

STEAM Scholarship recipient

2013