

# ERIC LUU

SOFTWARE ENGINEER

## CONTACT INFORMATION

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## SKILLS

**Front End:** JavaScript (ES6+), HTML5, CSS3, React, Redux, Material-UI, Bootstrap, jQuery

**Back End:** Node, Express, PostgreSQL, MongoDB, MySQL, RESTful API

**Testing:** Mocha/Chai, Jest, Enzyme, Travis CI

**Other:** Docker, Docker Swarm, AWS EC2, Heroku, Git, Webpack, TDD, Agile/Scrum

## EDUCATION

### Hack Reactor

Advanced Software Engineering  
Immersive, 2019

### City College of New York |

Bachelor of Engineering  
Biomedical Engineering, 2014 - 2019

## AWARDS

- Wallace H. Coulter Award for Outstanding Undergraduate Research Performance

## SOFTWARE ENGINEERING PROJECTS

### Clothesy | React, Redux, CSS3, Material-UI, Bootstrap

Shopping application product overview that provides an interactive user experience

- Crafted an expandable product view interface using conditional rendering with React and image magnification with Bootstrap
- Analyzed page load through Lighthouse and reduced first meaningful paint by 0.5s by optimizing image size
- Managed state of different product selected with Redux and individual component interactions with React Hooks
- Designed responsive UI for varying devices utilizing Material-UI for grid layouts and CSS media queries

### Clothesy API | PostgreSQL, Node, Express, Docker, Docker Swarm, AWS EC2, HAProxy

Redesigned scalable API service that prioritizes HTTP response time

- Increased maximum requests per second by 90% through load balancing by integrating Docker Swarm and HAProxy
- Reduced query speed in a PostgreSQL production database from 22s to 4ms through indexing and aggregating/combining multiple queries
- Containerized the API node server and PostgreSQL database using Docker
- Designed a Cloud architecture for handling increased requests by hosting node server on multiple AWS EC2 instances

### Aeroly | React, Express, CSS3, Moment, Material-UI, Bootstrap

Live flight travel deals tracking application

- Integrated Bootstrap with Skyscanner API to dynamically render a list of relevant airports while typing a destination
- Utilized session ids to generate a live list of prices that will redirect to an agent's page when clicked
- Applied airline and price filtering of live results

## EMPLOYMENT HISTORY

### Cell Culture Technician

City College of New York (2018 - 2019)

- Constructed mathematical models using MATLAB and cultured various cell types/lines: bEnd.3, hCMEC/D3, and hiPSC-derived brain ECs
- Trained and mentored students on aseptic techniques and cell culture