

# GAUTHAM VARADARAJAN

[gauthamvaradarajan@gmail.com](mailto:gauthamvaradarajan@gmail.com)

418 Madison St, Brooklyn, NY 11221

(908) 304-3685

## EDUCATION

### APP ACADEMY

- 1000 hour coding bootcamp with < 3% admissions.
- Strong emphasis on pair programming and best practices

February 2016 – May 2016

New York, NY

### THE UNIVERSITY OF CHICAGO

Bachelor of Sciences in Physics and Mathematics, **GPA: 3.2**

Chicago, IL

September 2009 – June 2013

## TECHNICAL EXPERIENCE

### TETHERMEDIA LLC

Project Development Intern

- Used jQuery to create profile picture upload and edit functionality for user accounts of realtor app
- Set up a custom server for Surespot (an encrypted message app for android) thereby confirming its flexibility for various customizations in a medical consulting app

November 2015 – January 2016

Cedar Knolls, NJ

### COLUMBIA UNIVERSITY

Research Assistant (Department of Astronomy)

- Searched for light echoes in supernovae, narrowing the candidate field for future research

December 2013 – August 2014

New York, NY

## PROJECTS

### [SOUNDSALLAROUND](#) (*SoundCloud clone built on Ruby, Rails, React, Postgres*)

- Caches amplitude data on upload to reduce load time for pages with multiple waveforms
- Keeps code DRY and modular by reusing React components
- Transfers data between backend and frontend via AJAX requests to a RESTful Rails API
- Minimizes the amount of database queries executed per request to allow for scale

### [HADRON.JS](#) (*JavaScript*)

*Physics Engine for Movement and Collision of Objects*

- Uses derived algorithms for handling collisions of objects, resulting in realistic game physics
- Implements an algorithm for accurate surface friction on the motion of objects

### [JUNIOR POOL](#) (*Browser Game in JavaScript, HTML5 Canvas*)

- Renders objects quickly, smoothly, and efficiently using HTML5 Canvas
- Implements Hadron.js (see above) to simulate pool ball collisions
- Uses nested JavaScript event handling for mouse click and drag to create a responsive user interface

## SKILLS

Ruby, Rails, JavaScript, jQuery, React.js, C/C++ (including STL), Flux, SQL, Git, HTML5, CSS3, Python (including SQLAlchemy, BeautifulSoup, unittest2),RSpec, Jasmine, Capybara

