

# BETTY PENG

(917) 575 - 6685  
betty\_peng@brown.edu  
bettypeng.com

## education

### Brown University

Class of 2017  
Computer Science & English  
GPA: 4.0 || Phi Beta Kappa Society

Relevant courses:  
Interactive Computer Graphics  
Computer Graphics  
Software Engineering  
Computer Systems  
Designing User Interfaces  
Humanity-Centered Robots  
Object Oriented Programming  
Algorithms and Data Structures  
Discrete Structures and Probability  
Linear Algebra

## projects

### arborea

An immersive virtual reality experience made with I-systems, gpu particles, and procedural terrain in C++, OpenGL, and OpenVR. Built for exploration with the HTC Vive.

### Ray

Geometric modeler and recursive raytracer with toggle buttons for specular and directional lighting, reflections, shadows, and texture mapping.

### The Blue Room

A HTML5 business strategy and time management game. Designed and implemented the entire front-end of the game. Built with Phaser, JS, and Java.

### Enchanted Clock

A Harry-Potter inspired, arduino-driven grandfather clock to track your friends around campus. Built the iOS app for location monitoring and helped set up the relay service between the server and stepper motors.

### Maps

A map application for Rhode Island, with zoomable and pannable street view, street search, path finding, and live traffic updates.

## experience

### Google Play Music

Software Engineering Intern  
June 2016 – August 2016

Decreased user's time to consumption and increased listening time by implementing entity search suggestions in Play Music web search, enabling users to quickly find and directly play songs, artists, albums, and stations. Improved accessibility features, responsive design, internationalization, and overall user experience by redesigning and implementing a new web player bar.

### Microsoft Pen & Touch Computing Center at Brown

Undergraduate Research Assistant  
January 2016 – Present

Designed and built a text editor and node detail views for a new collaborative pen-and-touch workspace application. Directly involved in defining product roadmap, designing and implementing new features, triaging bugs, and launching iterations. Working with a team of 10 to research and develop novel user interactions and experiences for smart desktops and spatial hypermedia systems.

### PASS Information Technology

Program Manager & Software Instructor  
January 2015 – Present

Head of Brown's student-run undergraduate software and computing education program. Plan and teach HTML/CSS/JS, jQuery, and Adobe Creative Suite to groups of 8-15 students. Added a new course to the curriculum and expanded the program to reach over 500 students in my first year.

### Brown University Computer Science

Undergraduate Teaching Assistant  
April 2015 – Dec 2015

Dedicate an average 15 hours per week to holding office hours, leading weekly student laboratory sessions, design checks, and review sessions, and grading assignments and projects to teach 350+ students the fundamentals of OOP in Java.

## skills

Java || Python || HTML / CSS / JS  
C || C++ || OpenGL || C#/XAML || jQuery  
Closure || Polymer || Protocol Buffers  
Git || Photoshop || Illustrator || LaTeX