# Ben Sheeran

Brown University, 69 Brown St., box 6796, Providence, RI 02912

425-208-9946 benjamin_sheeran@brown.edu

## EDUCATION

Brown University, class of 2018, Computer Science concentrator, 3.79 GPA

## SELECTED COURSE WORK

- Topics in 3D Game Engines – built a custom game engine from the ground up. Covered topics included 3D graphics in OpenGL, GLSL, 3D collision detection and response, path finding, and procedural map generation. My final group project included building a deferred lighting pipeline, Bloom/HDR lighting, particle generation, and shadow mapping
- Topics in 2D Game Engines (course taken fall 2015, TAed in 2016)
- Multiprocessor Synchronization
- Introduction to Computer Systems
- Intro to Computer Animation– an introduction to the 3D computer animation pipeline, including modeling, texturing, lighting, animating, rendering, and editing with an emphasis on building proficiency with Autodesk Maya. Culminated in short film made in its entirety by two other students and myself over the course of 6 weeks.
- Data Structures and Algorithms
- Designing, Developing, and Evaluating User Interfaces
- Introduction to Discrete Structures and Probability

## SKILLS

Programming Languages: Proficient in Java, C++, C#, C, GLSL

Frameworks/APIs: OpenGL, .NET, WPF, WinRT, Java AWT, Qt

Tools: Autodesk Maya, Adobe After Effects, Adobe Illustrator, ZBrush, Unreal 4, Qt Creator, Visual Studio

Other: Proficient in Japanese (9+ years of experience, studied abroad summer 2016)

## WORK EXPERIENCE

**2D Game Engines Teaching Assistant— autumn 2016**

Teaching assistant for 2D Game Engines course, a course on building an entire game engine from the ground up using Java. Responsibilities include giving lectures, writing and grading assignments, holding office hours and design checks, and providing final project guidance to student groups. Material covered by the course includes collision detection and response, physics, game AI, raster graphics, procedural content generation, and software engineering concepts.

**Brown University Graphics Lab Research Assistant — summer 2015 - spring 2016**

Worked under Andy van Dam doing research into pen and touch applications. Project involved designing an electric whiteboard application to facilitate small group collaboration and academic research, with a focus on large scale touch displays. Learned about UX design and software engineering. Main application developed using Microsoft's Universal Windows Platform (C# and XAML).

## PERSONAL INTERESTS

Member of Brown-RISD Game Developers, a group that collaboratively makes multiple games a year.