

Griffin Beels

Software Engineer

Education

- May 2017 - May 2021** **Brown University, Providence, RI**
- Sc.B, Computer Science. Concentration GPA: 3.9*
- Relevant Coursework: Distributed Systems; Computer Vision; Software Engineering; Computer Graphics; UIUX; Algorithms and Data Structures; Linear Algebra; Probability.

Experience

- Jun 2020 - Aug 2020** **Software Development Engineer Intern**
- Amazon - Seattle, WA**
- Worked on Digital Commerce Subscription Team.
 - Refactored monolithic classes and JUnit testing suite for long-term maintainability and extensibility, impacting over 30,000 lines of code.
 - Reduced team's operational overhead by 99% by delivering a library that uses an internal plugin framework to execute client defined runtime logic.
- May 2019 - Aug 2019** **Software Engineer Intern**
- MassDiGi - Worcester, MA**
- Led 6-person team as producer and software engineer for full mobile pre-production and production cycles for *Save the Flame!* (iOS / Android).
 - Optimized Unity object procedural generation in C# through pooling and customizable cumulative probability distributions.
 - Minimized overhead for designers through Unity inspector integration.
- May 2020 - present** **Head Teaching Assistant**
- Brown University - Providence, RI**
- Managed staff of 7 UTAs for Introduction to Computer Graphics with Co-HTA.
 - Designed digital learning solution for 100+ students, managed course logistics, held office and lab hours, and maintained course website.

Technical Projects

- May 2020** • **Emotion-based Snapchat Filter.** Trained Convolutional Neural Net to detect emotion, used to dynamically change a Snapchat filter in real time. [Python](#).
- Apr 2020** • **Raft.** Collaborated with teammate to create fault-tolerant distributed consensus protocol according to Raft paper, which enables scalable server architecture to agree on values. [Go](#).
- May 2019** • **Twitch Match.** Designed responsive frontend experience using Bootstrap and the Twitch API, allowing Twitch streamers to optimize growth using user statistics. [Java](#), [JS](#), [HTML5](#), [CSS3](#), [SQL](#).
- Nov 2018** • **C++ Ray Tracing.** Implemented raytracing using OpenGL for scenes composed of cubes, spheres, cones, and cylinders. [C++](#).

Personal Info

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Languages, Frameworks, and Technologies

Java, C++, C#, Go ★★★★★

Python, JavaScript, HTML / CSS, C, SQL ★★★★★

Spring Framework, JUnit, Mockito /PowerMock, Git, Unity, Gradle, jQuery, React Native, Bootstrap

Leadership Experience

May 2018 - present

Brown Esports - President and Software Engineer

- Increased membership from 100 members to 1000 members, leading 20-person executive board.
- Secured \$5000 of funding through University Finance Board for projects and equipment.
- Constructed front-end for Brown Esports website (brownesports.org).