

# Brandon S Yip

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Portfolio: <https://brandon-yip.github.io>

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## Objective

Seeking a software engineering or game development internship where my experience with programming, level design, and 3-D modeling will allow me to make meaningful contributions to a professional product while learning from accomplished individuals.

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## Education

University of Florida - Bachelor of Science in Computer Science (GPA 3.86)

Expected May 2024

**Relevant Coursework:** Software Engineering, Data structures + Algorithms, Database Systems (IP), Human-Computer Interaction, Operating Systems(IP), Programming Language Concepts, Programming Fundamentals, Digital Logic + Computer Systems, Computer Organization, Discrete Structures, Computational Linear Algebra

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## Notable Projects

Just 3 Days (UE survival game)

April 2022 - Present

- Constructed a functional inventory system using data tables and custom variable types using **UE4 blueprints**
- Designed and implemented a user interface and hotbar using **UE4 widgets**

Edufy (Web-based educational platform)

Feb 2022 - April 2022

- Organized weekly standup development meetings as the **scrum master** in an **agile** team environment
- Led the **React** front-end team to develop a live leaderboard and dynamically generated quiz pages.
- Utilized **Github** and **Circle-CI** to organize automatic software tests and work asynchronously with 3 others

Language Compiler

Feb 2022 - April 2022

- Interpreted a context-free grammar and regex language.
- Constructed the 4 main components a compiler( Lexer, Parser, Semantic analyzer, Code Generator) using **Java**
- Managed over 100 **JUnit** tests to debug and ensure scalability.

LOL44 (League of legends character picker)

Dec 2021

- Extracted over 500,000 players' character data from the **RIOT API**
- Organized player data into efficient graphical structures in **C++**
- Implemented various efficient search (character select) algorithms

Minesweeper

Feb 2021 - April 2021

- Implemented gameplay functionality in **C++** using linear data structures and recursive elements.
- Composed a user interface using the **SFML** graphics library.

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## Involvement + Leadership

Generational Relief in Prosthetics (GRIP) - Controller Research Team Member

Dec 2020- Jan 2021

Worked with a team to innovate new controller models for disabled gamers. Focused on 3-D modeling software and physical implementation of analog sticks..

Hack Club - President

Oct 2018-May 2020

Educated younger students and peers about programming fundamentals, computer hardware, and problem solving. Coordinated teaching material and developed interpersonal skills through team-building activities.

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## Skills

**Languages:** C++, Java, HTML, CSS, UE4 scripting, Matlab, javascript

**Tools:** Visual Studio, Unreal Engine 4, Git, React, Bootstrap, Circle-CI, Unity, Web-based API's, Excel, Onshape, Mozilla Hubs