

Grayson Clark

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WEBSITES, PORTFOLIOS, PROFILES

- <https://faultypine.github.io/#/>
- <https://github.com/FaultyPine>
- <https://www.linkedin.com/in/grayson-clark-ab67a2221/>

SKILLS

- **Programming Languages:**
 - C++
 - Python
 - Rust
 - C
 - Java
 - C#
 - HTML/CSS
- **Tools:**
 - Unix/Windows terminals
 - Debugging - GDB/debuggers
- Software testing - Unit tests
- Git
- Unity/Godot
- **Other:**
 - Computer Networking
 - Cooperation with teammates
 - Tutoring students
 - Library design
 - Documentation
 - Requirements analysis and design

EXPERIENCE

Camp Counselor, Deerfield Park District, May 2015-July 2020
Deerfield, IL

- Led and was responsible for a group of 13 kids
- Coordinated and led group activities for campers and counselors
- Helped campers build confidence and self-esteem through consistent guidance and mentoring
- Collaborated with staff to establish and maintain supportive and structured environment
- Maintained effective consistent communication with parents and families.

EDUCATION AND TRAINING

Bachelor of Science

Computer Science, Game Development, Indiana University, Bloomington IN Expected in May 2024

GPA: 3.6 / 3.9

Topics covered in my classes: Python, Java, HTML/CSS, Data Structures & Algorithms, Discrete Structures, Calculus

PERSONAL PROJECTS

- Lead developer/Creator of [Brawlback](#) - an implementation of peer-to-peer Rollback Netcode and Integrated Matchmaking for Super Smash Bros Brawl. Written with **C++**, and **PPC ASM**.
- Formerly lead developer for [HewDraw Remix](#), an open source modification of Super Smash Bros Ultimate, written in **Rust**. Was responsible for framework restructuring/maintenance, basic CI/CD infrastructure, an auto-updater/launcher, and gameplay modifications. Currently we have *~25 contributors* and *~4000 active players*. The project is composed of approximately *100,000 lines of Rust*, as well as python scripts for automating various tasks and infrastructure,
- Created [UltimateModShop](#), a homebrew application written in **C++** for the Nintendo Switch that allows users to download, install, and manage Smash Ultimate mods directly on their switch, using the GameBanana web API.
- Created multiple [modification plugins](#) for SSBU (Smash Ultimate) in **Rust**, as well as a guide to creating those plugins. This taught me about how to teach other people complicated topics, and how to create and maintain shippable products while making sure users are satisfied.
- Developed a **python** script called that takes in binary files and parses differences between them while styling the output into a format I use for Brawlback
- Created various **Unity** projects that [recreate game mechanics](#) from games like The Legend of Zelda: Breath of the Wild, and No Man's Sky.
- Created a command line program in **Java** that [manages a pretend store](#). It takes commands from a file and manages inventory, creates and validates staff schedules, and provides an interface to the user that can locate specific items in the pretend "store".