

Alexander Dunn

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EXPERIENCE

Rumble Games, Plarium — *Gameplay Engineer*

August 2022 – July 2024

- Worked as a Gameplay Engineer on Towers & Titans, a multiplayer hero-collector tower-defense game for Android, iOS, and Windows with 100k+ unique users.
- Worked with game and UI/UX designers to implement new meta-game features and systems.
- Had primary feature ownership for multiple features, including the quest tracking system and screens, bounty board system and dialogs, summon pity system, in-game event calendar, and more.
- Worked as an intermediary between game designers and platform engineers on the leaderboard and calendar systems to smooth over differences between the designer's plans and data and the backend software implementation's abilities and limits. In addition, created tools to translate data between the two sides.
- Implemented marketing tech to improve retention and engagement, including custom-scheduled email campaigns with claimable rewards, push notifications based on player activity, and easily customizable and schedulable in-game pop-ups that designers used to notify players of upcoming events and announcements.
- Investigated and debugged various issues across both the client and server.

BugSwarm Research Project, at University of California, Davis — *Programmer*

2021

- Worked under Dr. Cindy Rubio-Gonzalez as part of the team working on BugSwarm, a dataset of software bugs and their associated fixes made from real-world examples from GitHub repositories that use Travis-CI.
- Debugged and created patches for Java projects in the dataset that broke due to external dependencies.
- Improved the in-house bug classifier from a very often incorrect and unhelpful checker to an invaluable tool for the team's dataset maintenance efforts with a 97% accuracy rate.
- Created a new method and script to cache all dependencies of any Python project to improve its reproducibility without an internet connection and avoid future breakages.

EDUCATION

University of California, Davis

Graduated 2021

- B.S. Computer Science with Honors
- In a group of 4 as a capstone project, created a real-time multiplayer top-down shooter web game using NodeJS and WebSockets, written in TypeScript. Link: <https://github.com/o-chib/hexisle.io>
- In a group of 5, made a first-person stealth horror game using the Unity3D engine and C#, with my focus on gameplay programming and enemy AI. Link: <https://jeffkim.itch.io/miasma>

SKILLS

- Tools: Unity3D, Git, MongoDB, WebSocket, Docker, Android Studio, Unity Debugger, JetBrains Rider, DataGrip, Visual Studio, SQL, Postman, Leanplum, CleverTap, Linux CLI, Godot, Unreal Engine (learning)
- Programming Languages: C#, Java, TypeScript, HTML + CSS, Bash Script, Python, C++