

RYAN DAVIDSON

TECHNICAL GAME DESIGNER

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Denver, CO (seeking relocation)

Computer Science Graduate with a passion for programming and problem solving. Looking to use my excellent communication skills and technical expertise to develop impactful interactive narrative experiences.

TOOLS AND SKILLS

Programming Languages:

C++, C#, C, GDScript, Java

Programming Principles:

OOP, Data Structures, Algorithms, Multithreading, Operating Systems

Applications and Software:

Git, G-Suite, MS Office, OpenGL, Sourcetree, Trello, JIRA, Github projects, Unity, and Unreal Engine

Soft Skills:

Communication, Storytelling, Planning, Public Speaking

WORK EXPERIENCE

Game Programmer

Studio SE (PT Contract)
May 2024 - Present

AV/IT Support Technician

Sturm College of Law
Aug 2022 - Present

Technical & Admin Intern

Nonprofit Learning Lab
July 2021- Sep 2021

EDUCATION

University Of Denver

B.S. Computer Science
Minors in Mathematics
and Political Science

EXTRA XP & INTERESTS

- Favorite Games Include Destiny, Hollow Knight, and Outer Wilds,
- Acting, Poetry, and Performance
- Dungeons and Dragons

GAMEPLAY PROGRAMMING

- **4 years XP in Java, 2 Years XP in C#, C++, and Python.** Developing multi-month prototypes and projects in Unity and Unreal Engine
 - **Developed AI state machines and decision trees** to control enemy behavior
 - **Customized User Interfaces** to convey state of player **resources and abilities**
 - **Refactored prototypes** to address design gaps
- Well-versed with **source control tools** such as Git and organizational best practices
- Regressed over code to **assess design**, resolve bugs, and **improve performance**
- Studied Mathematics, **linear algebra**, trigonometry, cryptography. Implemented these concepts with numerous languages and frameworks, including **C#, C++, and OpenGL**
- Regressed over bugs to assure they are fixed and documented condition
- **2 years' experience as technical support:** resolve issues with AV equipment, computers, and networks. Optimized setup, troubleshooting of Mac, Windows, and Linux machines

DESIGN

- **Rapidly prototyped** 5 digital and over 10 analog game designs to assess design strengths and weaknesses, identify issues, balance systems, and **find the fun**
- Reviewed and delivered **technical** and **design-oriented feedback** to team members
- Utilized organizational tools such as **Trello and Jira** to keep track of progress and weigh deadlines when **considering new mechanics** and features
- Several years of building encounters, **evaluating balance**, and **expanding design** for existing tabletop RPG systems such as D&D, Savage Worlds, and Blades in the Dark

COLLABORATION AND COMMUNICATION

- Led developers, coordinated with game designers and artists to **manage features and planning** on short deadlines of 48 hours for game jam projects
- **Coordinated implementation of features and delegation of tasks** to manage within deadlines set by team consensus for Star Charger
- Provided **clear communication and detailed explanations** to team members on status of current issues, upcoming projects, and **inner-workings of code architecture**

HIGHLIGHTED PERSONAL PROJECTS

Programmer & Designer | [ModelRunner](#) | Unreal | C++ | Solo | Paid Contract

3D runner/quiz game created for [Studio SE](#) for use as a trade show booth attraction.

Outlined and executed design concept within **provided specifications** and design constraints such as short development time. **Programmed and implemented all systems.** 1 Month

Sole Programmer & Designer | [Bitwise Key](#) | Unreal | C++ | Team of 2

First Person 3d metroidvania/roguelike tying player progression to the acquisition of randomized abilities. Implemented **AI behavior through state trees**, the randomization mechanics, and the **character movement controls.** 1 Year

Systems and UI Programmer | [Star Charger](#) | Unity | C# | Team of 7

Bullet hell space shooter. **Developed game systems** with Parameterized variables and **intuitive UI** design. Also served as **producer**, taking an active role in coordinating **delegation of tasks** and organization of milestones in the game development pipeline. 9 months