Logan Bowers

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Game developer with a flexible skillset and a passion for solving complex problems.

EDUCATION

Georgia Institute of Technology (Fall 2019 - Present) **Atlanta, GA**

- Pursuing B.S. in Computer Science (Threads: Media and Modeling/Simulation)
- Minor in Robotics
- May 2023 Graduation (4.0 current GPA)

PROJECTS

Beam (Fall 2021, Unity) https://github.com/Bowers-L/Beam

- Lead a 6 member team with a pipelined level design approach involving ideation, sketches, greyboxing, balance, and polish
- Designed, implemented, and maintained beam system using custom raycasts and physics
- Constructed visual effects using HLSL Shaders, VFX graphs, and Photoshop

Bond Monke (Spring 2021, Unity) https://github.com/Bowers-L/BondMonke

- Implemented souls-like movement and mechanics using root motion and fixed-frame animations
- Engineered player and AI combat using navigation meshes and custom state machines
- Fine-tuned parameters such as startup frames, animation speed, and damage to achieve optimal game feel and balance

Graphics Engine (Summer 2019-2020, Custom C++) **https://github.com/Bowers-L/GraphicsEngine**

- Modeled light sources utilizing the ambient, diffuse, specular model by using GLSL shaders in conjunction with C++
- Constructed a virtual camera by using user input to manipulate the Model-View-Projection matrix and used index buffers to optimize rendering
- Developed a path finder program using A* to visualize the optimal path between points in a nav-mesh

One Way Out (Spring 2020, Custom C Engine) https://github.com/Bowers-L/OneWayOut-GBA-Final Project-

- Implemented metroid-style gameplay mechanics and graphics using C
- Devised a technique for rendering backgrounds larger than normal by periodically loading in new textures off screen with DMA
- Used hardware interrupts to implement sound by DMA-ing sampled sound bits into special registers that are read by the speaker

Leadership/Work Experience

Scientific Software Developer Intern, Stellar Science (Summer 2021)

- Maintained and debugged large-scale C++ codebase using Visual Studio and Git.
- Gained professional agile and pair programming experience working with experts in the fields of Computer Science, Math, and Physics
- Iterated on company mockups to implement image batch processor UI in QT, manage file system data, and integrate UI with functionality.

Project Lead, VGDev (Fall 2021)

- Oversaw the initial game design and prototypes for “Beam”, which is a 3D puzzle game.
- Formed and executed on 3-month Agile iteration plan with 3-4 week sprints
- Maintained team communication through weekly meetings and frequent updates to the team and the larger organization.

SKILLS

- **Programming** (proficient): C++, C, C#, Java (working): Python, GLSL, HLSL
- **Game Engines:** (proficient): Unity, Java Processing (working): Unreal Engine 4, Game Maker
- **Tools:** (proficient): Git Bash/Github/BitBucket, Trello/Codecks, OpenGL (working): Blender