Samuel Maclaine Klosky

macklosky21@gmail.com | 571-471-2928 | Chantilly, VA | github.com/macklosky211 | in/samuelklosky

TECHNICAL SKILLS

- **Skills**: Game Engine Architecture (Godot & Unity), Real-Time Data Processing, Object Oriented Programming, Git / Version Control
- **Languages:** C, Java, Python, JavaScript, GDScript
- **Tools:** Godot, Unity, Adobe Substance Painter, Blender, Aseprite, Vim, Visual Studio Code
- **Awards:** Eagle Scout

EDUCATION

George Mason University
Bachelor of Science in Computer Science | Dean's List 2025   Sept 2022 - Dec 2025

PROJECTS

Rotary Engine Compression Tester | Embedded Systems, C   Nov 2025
https://github.com/macklosky211/rotary-compression-tester
- Designed and implemented a C-based real-time data acquisition system to measure rotary engine chamber compression under <2 KB working RAM constraints
- Built a real-time processing pipeline to sample, filter, and display compression data operating at ~3ms intervals
- Validated accuracy through live testing on a Mazda RX-8 rotary engine, iterating on signal handling and calibration logic
- Engineered the system with minimal memory overhead deterministic execution, targeting embedded-style constraints

Gladiator Arena Browser Game | Godot, GDscript   May 2025 - Aug 2025
https://samuelklosky.itch.io/cs-325-project | https://github.com/macklosky211/cs-325-project
- Developed a browser-deployed arena combat game in Godot, implementing core combat, AI, and player movement systems while optimizing for Web export performance constraints
- Designed and implemented enemy combat AI using finite state machines, including pursuit, attack, recovery, and death states, with tunable parameters for difficulty scaling
- Maintained stable frame rates above 60 FPS during gameplay by optimizing asset usage and runtime execution
- Designed custom player movement logic supporting momentum-based actions such as wall running, wall jumping, and sliding, with responsive input handling and state-dependent behavior

Hytale Game Mods | Hytale, Java   Jan 2026 - Feb 2026
https://www.curseforge.com/members/katsi/projects | https://github.com/macklosky211/HytaleModsCollection
- Designed and implemented player-facing gameplay systems in Java, including reward mechanics and reusable mod frameworks, adopted by 392+ unique users
- Owned the full gameplay feature lifecycle from design and implementation to testing, balancing, and live release

Multiplayer Shooter Arena Game | Godot, GDscript   July 2025
https://github.com/macklosky211/Stratos
- Engineered advanced player movement mechanics including sliding, vaulting, and momentum-preserving traversal
- Built and synchronized peer-to-peer multiplayer functionality handling player movement and combat state replication across networked sessions

EXPERIENCE

IT support admin | Chantilly, VA   Sept 2022 - May 2023
- Shadowed the Head IT Administrator for FCPS throughout a full academic year, supporting day-to-day IT operations
- Diagnosed and resolved user, hardware, and software issues while delivering reliable technical support across the organization