Maxwell Kenny

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EDUCATION

University of Michigan Ann Arbor, MI
Bachelor of Science in Engineering (BSE), Computer Science *Expected May 2027*
Bachelor of Science in Engineering (BSE), Aerospace Engineering *Expected May 2027*
GPA: 3.38/4.00
Coursework: Game Engine Architecture, Data Structures and Algorithms, Web Systems,

WORK EXPERIENCE

Navitas Systems Ann Arbor, MI
Battery Management System Engineering Intern *May 2025 – August 2025*
- Led design verification for Battery Management System PCBs by writing and executing test procedures using DMMs, Power Supplies, and Electronic Loads
- Developed software to manage MCU handling of Unified Diagnostic Service (UDS) commands received from testing and charging hardware.
- Streamlined verification and reduced engineering hours with a custom-built Python pipeline that automatically generated test documentation from Excel sheets.

PROJECT EXPERIENCE

ArcJet Ann Arbor, MI
Solo Developer *May 2025 – Present*
- Building a custom C++ Unity-inspired 3D game engine leveraging modern OpenGL for real-time rendering with shaders, lighting, and a camera system.
- Implementing a data-oriented architecture for high performance entity and particle simulation.

Ion Engine Ann Arbor, MI
Solo Developer *January 2025 – April 2025*
- Designed and implemented an open-source, cross-platform, C++ game engine inspired by Unity, featuring a custom in-editor interface for scene editing, asset management, and live debugging.
- Integrated GLM, SDL, Dear ImGui, and RapidJSON to support transforms, cross-platform windowing, custom UI, and scene serialization.
- Developed a data-oriented particle system optimized to render millions of objects in real time.

Templated Instagram Clone Ann Arbor, MI
Software Developer *August 2025 – Present*
- Built a full-stack Instagram clone featuring multi-user accounts, posts, comments, and likes powered by server-side dynamic pages.
- Implemented backend logic with Flask and SQLite, integrated Jinja2 templates for dynamic HTML rendering and deployed the application on AWS.

SKILLS

Programming: C, C++, C#, Python, ARMv7 Assembly, Bash, Verilog, MATLAB, Linux, HTML, CSS
Graphics/Game Dev: OpenGL, GLSL, Box2D, Lua, SDL, Dear ImGui, GLM, RapidJSON, Unity, Godot, Unreal
CAD/Hardware: Altium Designer, KiCAD, Siemens NX, SolidWorks, Autodesk Inventor, Star-CCM+, Ansys Discovery
Collaboration: Teamcenter, Arena, Jira, Confluence