

JOSH ZIEGLER

Burke, VA | 703-606-7226 | joshziegler76@gmail.com | github.com/joshziegler7666 | joshziegler.org

EDUCATION

George Mason University — B.S., Computer Engineering

Expected Graduation: 2029

GPA: 3.8 | Fairfax, VA

- Relevant Coursework: Calculus 1/2, Object Oriented Programming, Intro to Computer Science (Python), Electrical Engineering

TECHNICAL SKILLS

Languages: C, C++, Java, Python, JavaScript, x86 Assembly

Tools: GNU Debugger (GDB), Makefile, Git/GitHub, Linux

Cloud/Certifications: AWS Certified Cloud Practitioner (2026)

PROJECTS

jOS — Custom Operating System

github.com/joshziegler7666/jOS

C, x86 Assembly, GDB, Makefile

- Built a bootable x86 OS from scratch in C and x86 Assembly
- Wrote a UEFI bootloader that locates the Graphics Output Protocol, loads the kernel binary into memory, and exits boot services before calling the kernel start address
- Implemented VGA framebuffer for graphics output and custom ASCII/bitmap font for printing to the console
- Wrote simple PS/2 keyboard input handling without any external driver dependencies, and live shell commands (help, background-color, ui-scale)
- Debugged boot and runtime problems using GDB and QEMU, and used Makefile to structure each build

Multiplayer Wordle

github.com/joshziegler7666/multiplayerWordle

JavaScript, WebRTC/P2P Networking

- Developed a real-time, peer-to-peer multiplayer version of Wordle, enabling direct client to client gameplay without a central server
- Implemented game state synchronization to keep all connected players consistent in real time

EXPERIENCE

Hollow Oak Comics — Retail Website (July 2026)

hollowoakcomics.com

Web Development

- Designed and developed a customer facing e-commerce website for a comic book publishing company, including product listings and integrated Stripe checkout
- Automated order processing by sending order data to manufacturers and confirmation emails to customers using API calls
- Deployed the storefront to Cloudflare Pages for high uptime and low latency, and moved backend API functions to serverless Cloudflare Workers to eliminate server costs

Mountain Biking Camp Counselor — Baroody Camps (Summers, 2021 - 2026)

- Co-led a mountain biking camp program alongside one other counselor for five consecutive summers
- Managed camp logistics in an outdoor environment, developing leadership and communication when plans changed from weather, mechanical issues, or injury
- Mentored campers ages 9-15 with varying skill levels, adapting instruction to build confidence and technical riding ability