

GABE ALVARADO

Wilmington, NC | (828) 289-1497 | gabeyshark76@gmail.com | gabealvarado.org | github.com/GabeyShark7

EDUCATION

University of North Carolina Wilmington

Wilmington, NC

Bachelor of Science in Software Engineering

Expected May 2028

Isothermal Community College

Spindale, NC

Certificate in Programming and Game Design

PROJECTS

SharkPad | Python

sharkpad.net

- Built a note-taking app for students who need to capture a lecture while drawing, like organic chemistry structures, combining voice dictation, text editing, and drawing in one window
- Designed and shipped it solo, reaching 100+ downloads across independently packaged Windows, macOS, and Linux builds
- Integrated LLM APIs to run voice dictation live alongside typing and drawing, plus one-click summarization of notes
- Packaged native distributions in pure Python with no cross-platform framework, handling all OS-specific build and release work

RunBun Sandbox | C++, OpenGL, GLSL

github.com/GabeyShark7/RunBun-Sandbox

- Built a real-time 3D model viewer and editor from scratch with a custom OpenGL pipeline and GLSL shaders, rendering to a framebuffer inside a dockable viewport
- Implemented FBX, glTF, and GLB import via Assimp with per-object textures, an object hierarchy, and transform controls
- Designed a Dear ImGui editor with Scene, Objects, Properties, and Console panels and a first-person camera
- Architecting multiplayer scene sharing in which a host owns the authoritative scene and syncs edits to clients as event-based deltas

Enterprise Linux Migration, 45Drives | Ansible, Linux, SSH

Completed

- Migrated 45Drives' Windows-based work environment to Zorin OS Linux as part of a six-person team
- Wrote Ansible playbooks for tool installation and user account creation, deployed from a central control node to target machines over SSH and Tailscale
- Contributed to an idempotent deployment design: new machines are enrolled by adding them to inventory and rerunning the playbook

EXPERIENCE

Digital Maker Space Assistant, UNC Wilmington

Aug 2026 – Present

- Support students and faculty on 3D printers, laser cutters, and other fabrication tools
- Troubleshoot hardware and print failures and guide users through design software

TECHNICAL SKILLS

Languages: Python, C++, Rust, Java, SQL, JavaScript, HTML, CSS

Graphics: OpenGL, GLSL, Assimp, Dear ImGui, GLFW, GLM

Infrastructure: Ansible, Linux (Zorin OS, Ubuntu), SSH, Tailscale, Git

AI-Assisted Development: Claude Code, OpenAI Codex, LLM API integration

Tools: VS Code, PyCharm, MSYS2/MinGW