James Galbreath

4-1 Journal

7/27/25

Part 1

I have not changed my mind about what I want to do with this degree, and I don’t think I’ll be changing my mind anytime soon. I think my expectations and what I believe I need to do to achieve my original goal has changed. I set out to find a challenging career field that I could potentially work from home. This degree gives me the best chance to achieve that goal. I am a family man, and I want to be close to my wife and kids rather than going out and doing what I do now.

I think my perception of the industry as a whole has changed drastically since I first set out to do this. This degree is certainly a great steppingstone but to be successful and find a career that truly satisfies me I will have to further my education. If I could do it again, I would not have gone this route. Unfortunately, this field is becoming a saturated market and I hope I am able to stand out in the crowd. A recent *Financial Times* article, “Is AI Killing Graduate Jobs?”, highlights a sharp drop in entry-level job postings down 43% in the U.S. due to not just AI, but broader economic pressures.

Part 2

For the Software Design and Engineering category, I selected my SceneManager.cpp file as the artifact to enhance. I’ve made strong progress toward improving the structure and quality of the code. I cleaned up unnecessary includes, corrected naming conventions, and added comments to clarify the purpose of each function. One major enhancement was adding proper cleanup logic for OpenGL shaders. Previously, shaders were not being deleted after use, which could lead to memory leaks. I also improved modularity by separating scene loading from rendering logic and added basic error handling for asset loading. My next steps are to do a final pass for any redundant code and ensure alignment with core software engineering principles like the Single Responsibility Principle.

Sources

Financial Times. (2025, July 23). *Is AI killing graduate jobs?* https://www.ft.com/content/99b6acb7-a079-4f57-a7bd-8317c1fbb728