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CS-499

Module 4-1 Journal

July 2025

**What is the significance of each trend?**

The two trends I chose were the Future of VR and AR as well as The Future of Video Gaming: Technologies that Will Transform Our Experiences. The future of VR and AR is significant because it will change the way we simultaneously localize and map. One example of this is the company Niantic’s base algorithm which translated its surroundings from the real world into the virtual world (i.e. Pokemon GO). VR and AR will also be important tools in medical training. High quality Virtual Reality has already begun to be used to train students at universities for medical-related situations. VR and AR are significant to the video game industry because they will be used to create more immersive experiences. This will be a huge draw for audiences and change the way people play video games. Another significant thing AR and VR bring to is with AI. AI can not only help improve gameplay experiences with smarter NPCs (non-playable characters) but it can also help artists and game developers to more quickly create content for games.

**How will each trend change the field of computer science?**

VR and AR will change the field of computer science because all aspects of computer science will begin to integrate into them. Code will have to be written for programs to simulate a medical situation. Security will have to adapt to the use of AI to potentially harm secure information. Finally, VR and AR will change the way video games are developed as well as viewed by a consumer.

**How will each trend change the experience of consumers, workers, or citizens?**

AR and VR will change the experience of consumers, workers, and citizens because it will be integrated into more of our daily lives. VR and AR will be used to enhance marketing to consumers as well as help workers with their jobs. Some jobs may even be replaced by AI workers. AR and VR in video games will drastically change the experience for consumers. As was mentioned above, games will continue to become more immersive and the quality improved. There will also be more games to consume as the development process of making video games becomes easier and quicker with the help of AI.

**How will each trend fit in with your career interests or aspirations?**

Each trend will fit in with my career interests similarly. Considering that I plan to enter the field of video game development AR and VR will be something I will encounter almost immediately. Learning how to properly utilize both can also help me to gain a head start in the career as they continue to be integrated into video games.

**Which course outcomes have you achieved so far, and which ones remain?**

The course outcomes that I feel I have achieved so far are employing strategies for building collaborative environments as well as design and evaluate computing solutions that solve a given problem. The ones that remain are to design develop and deliver professional quality oral, written, and visual communication as well as demonstrate the ability to use well founded and innovative techniques, skills and tolls in computing practices.

**Part Two:**

**Status Checkpoints for All Categories**

| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| --- | --- | --- | --- |
| **Name of Artifact Used** | **Artifact name:** 3D Scene  **Origin:** CS 330 Computational Graphics and Visualization | **Artifact name:** 3D Scene  **Origin:** CS 330 Computational Graphics and Visualization |  |
| **Status of Initial Enhancement** | Enhancements completed | Enhancements completed | Working on enhancement but on track for the submission deadline with a day to spare for issues |
| **Submission Status** | Working on enhancement but on track for the submission | Working on but on track for the submission | Planned but not yet completed |
| **Status of Final Enhancement** | Planned but not yet completed | Planned but not yet completed | Planned but not yet completed |
| **Uploaded to ePortfolio** | Planned but not yet completed | Planned but not yet completed | Planned but not yet completed |
| **Status of Finalized ePortfolio** | Planned but not yet completed | Planned but not yet completed | Planned but not yet completed |