

5-1 Journal: Computer Science Trends and Artifact

Joel Garcia

SNHU CS-499

Part One:

For this assignment I am choosing the trends of artificial intelligence and autonomous systems.

1. What is the significance of each trend?

Artificial intelligence and autonomous systems are both significant developing technologies in computer science. Popular implementations of these technologies are programs like ChatGPT and OpenAI for artificial intelligence and Waymo self-driving cars or autonomous UAVs in the defense industry.

2. How will each trend change the field of computer science?

Each is being used to automate things that were until now only done by humans, such as writing or creating images and art, or operation of various vehicles and aircraft.

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

As these trends continue to develop we will see more menial tasks replaced with automation. This could have both negative and positive consequences. Many will undoubtedly suffer from their initial replacement as certain human jobs are rendered obsolete. At the same time, automation of dangerous tasks like driving would result in more free time and less danger to those with access to these systems.

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

Both fields have been my interest and career goal since starting my undergraduate degree, and my entire capstone project is designed around them. I plan to apply for jobs in the defense industry after graduating and hope to work with autonomous vehicles once I gain enough experience.

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

I feel that I have or am at least close to achieving the course outcome goals I set at the start of this course. While my final project isn't yet complete, I have completed the planned enhancements to a level that I was not sure I would be able to achieve. All that remains is to put them together into the final project.

Part Two:

Provide an update to your instructor on your progress with each category of artifacts for the ePortfolio:

- Software design and engineering

Enhancements have been implemented and object parameters are user-adjustable.

- Algorithms and data structures

Enhancements have been implemented and drone movement adjusts based on object variables.

- Databases

Enhancements have been implemented. Dataset is created and is used for data visualization.

Status Checkpoint for All Categories

Checkpoint	Software Design and Engineering	Algorithms and Data Structures	Databases
Name of Artifact Used	Artifact Name: Interactive 3D Scene Origin: CS 330 Computer Graphics and Visualization	Artifact Name: Interactive 3D Scene Origin: CS 330 Computer Graphics and Visualization	Artifact Name: Interactive 3D Scene Origin: CS 330 Computer Graphics and Visualization
Status of Initial Enhancement	Enhancements completed	Enhancements completed	Enhancements completed
Submission Status	Resubmitted	Submitted	Submitted
Status of Final Enhancement	Pending	Pending	Pending
Uploaded to ePortfolio	Pending	Pending	Pending
Status of Finalized ePortfolio	Pending	Pending	Pending