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When it comes to major technological trends, Artificial Intelligence (AI) is an obvious one. AI has gained significant momentum in recent years, especially with the rise of large language models (LLMs) like ChatGPT. It has impacted almost every sector, including healthcare, entertainment, computer science, agriculture, and more. For workers, AI helps reduce repetitive tasks, allowing them to focus on higher-level problem-solving. In computer science, AI proves valuable in debugging and answering simple questions. While it can generate complex code, integrating that code can be challenging without a solid understanding of each line's function, which suggests there is still a need for programming expertise.

For the general public, AI, like many tools, can be used for good or for ill. While using it for daily tasks can be helpful, becoming overly reliant on it can pose a problem when it comes to self-reliance. Additionally, there are many ethical concerns surrounding AI, such as its impact on jobs, the potential for plagiarism, and the use of data without consent, among others.

5G technology is another trend that has been emerging for a couple of years now, offering faster speeds and lower latency. 5G affects computer science by enhancing cloud computing, real-time data processing, and the development of applications that require fast and reliable data such autonomous vehicles and robots. With its increased bandwidth, 5G opens new opportunities for innovations in networking, device communication, and real-time analytics, enabling developers to create more advanced applications.

**Status Checkpoints for All Categories**

|  |  |  |  |
| --- | --- | --- | --- |
| Checkpoint | Software Design  And Engineering | Algorithm And  Data Structures | Database |
| Name of Artifact Used | Event Tracker | Event Tracker | Event Tracker |
| Status of Initial Enhancements | In Progress | Complete | Completed |
| Status Of Final Enhancement | In Progress | In Progress | In Progress |
| Uploaded to E Portfolio | Completed | Completed | Completed |
| Status of Finalized E Portfolio | In Progress | In Progress | In Progress |