1-3 Assignment: Short Paper

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As a college student studying full-stack software development, I have been fortunate to delve into the fascinating world of Artificial Intelligence (AI). Through my studies, I have gained knowledge of various AI concepts and functionalities. I have eagerly sought information from reputable sources like TED talks and Nvidia deep learning groups, among others.

My passion for electronics, computers, and robotics has always been strong. However, my greatest interest lies in the realm of creating my own AI software and robotics. Although I must admit that my initial exposure to artificial intelligence primarily came from films and video games, I recognize that society and our current world have embraced the exploration of safe and innovative applications of AI. Its potential to benefit end-users, medical institutions, and businesses is immense. Practical or advanced solutions in Machine Learning or Deep Learning can be tailored to meet specific needs and requirements of users or clients. As of 2023, we have witnessed significant growth in the field of applied robotics and Machine Learning or Deep Learning systems. The introduction of groundbreaking ideas and concepts in these domains holds profound implications for the future. Whether these implications prove positive or negative ultimately hinges on the moral compass of the developers and engineers behind AI projects.

Nowadays, it is commonplace to encounter a wide range of systems and robotics developed by renowned companies such as Amazon, ChatGPT, NVIDIA, Tesla, NASA, and many more. These companies are at the forefront of AI-driven advancements. Other notable players in the field of robotics AI include Texas Instruments, NVIDIA, and Boston Dynamics. These organizations have spearheaded projects that integrate AI and Deep Learning into automated services like self-driving vehicles, organizational machines, facial tracking and object identification, pattern observation, cooking, customer service robots, companion robots, voice assistants such as Alexa, Echo, and Siri, GPS mapping data, self-cleaning robots like Roomba, and countless other projects that are currently in development.

The rapid progression of AI and robotics is transforming our world in ways we could have never imagined. As a college student that is passionate about the field, I am excited to contribute to this dynamic and ever-evolving industry. As a developer, however, I grapple with a significant concern: the potential obsolescence of my role as a programmer due to advancements in AI. There is an ongoing process where computers are increasingly capable of debugging and generating their own software. Many engineers and developers have already started leveraging AI to streamline their workload, which is a positive development. However, I believe that AI is still far from perfect and there are inherent risks if proper guidance is not provided.

While AI can provide valuable insights and methods for implementation, it has limitations. It may lack access to updated information and fail to comprehend the specific context of a developer's scenario when it comes to project code. Consequently, the output generated by AI in programming may not always be entirely accurate. It can overlook important elements such as libraries, include files, or employ outdated techniques. While AI is increasingly utilized in programming, it is crucial to exercise caution and recognize its imperfections. The expertise and critical thinking of human developers remain indispensable in ensuring the accuracy and effectiveness of software development processes.

My aspiration is to contribute to the development of AI and robotics that can significantly impact the medical field by enhancing the lives of countless individuals. This dream is deeply rooted in personal experiences, particularly witnessing the challenges faced by my disabled father. While my interest in AI was initially sparked by popular science fiction movies such as iRobot, Bicentennial Man, Artificial Intelligence, and Terminator, it was my father's struggles with conditions like RSD, sciatica, arthritis, and other medical ailments that truly motivated me.

Observing my father's excruciating pain and his limited mobility has been a heartbreaking experience. I have always harbored the idea of creating a robot that could assist him by providing transportation, ensuring his safety, and helping with tasks around the house. This vision is driven by a sincere desire to alleviate his suffering and improve his overall quality of life. By pursuing a career in AI and robotics, I hope to translate my passion into tangible solutions that can benefit individuals like my father and many others facing similar challenges. The potential applications in the medical field are vast, and I am committed to dedicating my skills and knowledge to make a meaningful impact.

In conclusion, my ultimate goal is to merge my fascination with AI and robotics with the opportunity to positively impact the lives of individuals in the medical community. Through innovation, determination, and compassion, I aim to create technologies that can bring relief and assistance to those in need, inspired by the personal struggles of my own father.

**Sources**

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