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CS 292

Debate 9 Topic: Ethical Standards

Background: Technology is shaping the world we live in and society so vastly already, in ways we probably cannot even grasp at the moment. As it stands today, software engineering and computer science does not have a set of ethical standards or certification, like fields with large impact have had, such as chemistry, medicine, or physics. Software can have catastrophic consequences if a failure were to occur, so reliability is generally a large requirement of new systems. There are also social failures, such as software not working for people with diverse backgrounds, which hurt our society but are not a main focus in the design process. A set of standards would help software be more focused on making the world better, rather than just trying to get something out the door that is ‘cool and interesting’ without regard for the societal consequences that may occur. It also may have the effect of slowing the industry down and limiting innovation.

Side 1: Computer Science should establish ethical standards and objective review boards that examine technology before it is released to the public. Software is so deeply engrained in our everyday lives that there must be a set of guidelines to govern the ethical issues that arise, instead of just picking up the pieces of a catastrophe that could have been prevented. All other fields that are as engrained as software in life have certifications and ethical standards, and software is no different. It gives the power back to the engineers, rather than the business, to make ethical choices on the software they create, instead of just doing so to keep their job. It may slow innovation, but it will have better effects in the long term to prevent any terrible consequences and will increase public trust in new tech. There is already a push from the student level about ethical issues and how to be more aware of the software we make, which needs to be expanded into industry before it is too late.

Side 2: It is impossible to foresee and prevent all the possible dangers that technology can cause, so there cannot be well-defined ethical standards and there is no practical use case for review boards. The whole nature of the technology industry is that it moves so quickly and innovation is constantly happening, and with ethical standards this could stifle what the industry is all about. Review boards would not be practical because there are new fields being born every day and the societal impacts cannot be understood until it is released to the public. Many new technologies probably seemed like a bad idea until they were released and normalized by the public. Review boards and ethical considerations could also be extraneous, since not all software has the same impact on society.

Possible Resolution: All engineers, including software engineers, should include ethical considerations in all of their projects. Software should be focused on making the world better, or just even more fun. With no regard for ethics, it could cause irreparable harm to society and potentially cause public mistrust in new and emerging technologies. There are already proposed sets of ethics by some organizations, and these should be expanded for the field, but with slightly less emphasis than civil engineering for example to preserve the fast moving and innovative nature of software.