Reflective Activity 1: Ethics in Computing

For the purpose of this reflective activity, I decided to focus on the perspective of a software developer in an average, mid-tier corporation. Stahl et al rightly point out that researchers of ethics in technology fail to provide useful recommendations to computing professionals, and furthermore, also observe that computing professionals are often ignorant of the ethical ramifications in their own projects (2016).

As a software developer, I would rely on organisations such as the Association for Computing Machinery (ACM) or British Computing Society (BCS) to help develop and proliferate standards in a grassroots approach to individual computing professionals. From the top-down perspective, I would rely upon my corporate infrastructure to provide guidance and expertise dedicated to ethics. Whilst this would require financial resources from the corporation, the return on investment would be instantly realised by preventing damages caused by ethics-related incidents (De Cremer & Vandekerckhove, 2017). In the rapidly evolving field of computer science, asking developers to monitor ethical concerns in the midst of frenetic development cycles is a disservice to developers, clients, and users alike. I believe that monitoring ethics should be a deliberate and accountable process, and the exclusive priority of at least one human being in a computing organisation. Without this guidance, I would feel personally responsible - and also, insufficiently equipped – for the identification and mitigation of ethical issues. As a result, I would likely deliver sub-par software and inadequate ethics monitoring.

The rapid evolution of this field also means that computing professionals – or anyone else – are not fully aware of the ethical concerns presented by technology, especially when it comes to machine learning or artificial intelligence (Resseguier & Rodrigues, 2021). Because of this, existing ethical guidance is abstract and difficult to implement (Resseguier & Rodrigues, 2021). Because we have collectively failed to determine "right" and "wrong" in the field, I believe that laws and policies are unable to regulate the implementation of advanced computing technologies. As a developer, I feel that being held to a standard that does not exist would be incredibly frustrating and unfair.

Since Stahl et al.'s survey in 2016, Gordon et al. conducted a multi-stakeholder analysis with focus groups from academia, industry, and public citizens (2022). Researchers elicited the top ethical computing concerns from each group, and found that the top concerns were not surprising: academics focused on how to teach ethics, industry focussed on the risks brought by a lack of diversity in the workforce, and the public was worried about the growing societal implications brought by social media (Gordon et al., 2022). This study also stated that all groups felt that developers lack empathy toward the populations who use their software, and thus, would not be able to identify ethical concerns in the first place (Godron et al., 2022). From a developer's perspective, this may come across as harsh criticism and largely hypocritical. I believe this indicates that both the software developer, and society as a whole, could benefit from increased mutual understanding on the cause, effect, and perpetuation of ethical issues.

References

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