Steven Nguyen's Ethical Framework for Technology

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As the world progresses and technology continues to evolve, we are more than privileged to live in a society where many of our personal lives are assisted with automation. But with that comes a double edge sword, as it also becomes easier for anyone to act with malicious intent, especially with software. It is critical that engineers stay ethical as they have the power to solve problems or open a can of worms to some more. As the people around the globe become more and more technologically dependent, software engineers are a bit more relied on in terms of creation and ethics. Developers must rely on their judgement as we depend on it, in order to keep integrity and independence. Another characteristic is management and how leadership should always set a standard moral ethics when approaching software development. The next essential point that's extremely vital is self, meaning engineers should be devoted to always learn within their discipline and encourage ethical approaches to software development.

A software's judgment is critical in ethical responsibilities while in the development space as it creates a foundation of trust for the users and society. When developers have to make decisions, they are responsible for the direct or indirect outcome that could possibly negatively impact those not even utilizing the product. Trust may only be built and relied on if we as engineers keep ourselves accountable with the professional judgment learned over the years and to resist peer pressure for those who have more to gain like companies, users, and shareholders. A prime example could be lower user security in order to save money and earn higher profits to satisfy higher management. Ultimately, an engineer's judgement needs practice in order to weigh ethical choices and their independence ensures that software going forward is designed, created, and pushed in good will, rather than selfish need.

Another critical value in ethics is management and where people within software have to set for how practices and standards become. The best leadership prioritizes ethics with innovation and ensures that projects are successful and morally aligned. We have the responsibility of making environments where concerns can be spoken without the fear that something bad may happen and that transparency is highly valued, whereas shortcuts will never be rewarded over integrity. If the industry ever ignores these standards, it will create an everlasting effect where the team could feel compelled to take the shortcuts or even silence their concerns. Always pushing standards of ethics to software development requires detailed planning, foundation of expectations, and accountability everywhere. Those who exemplify ethical responsibility to empower engineers to uphold values and reinforce the idea that professionalism and morality are together in technology.

When thinking about one's self, something that holds continuous responsibility over engineers is growth and awareness. The technology space and industry is and if not the fastest-evolving fields

in the world and with lighting speed, something that comes with it is never ending ethical dilemmas. Those who commit to keep learning over the span of their life in order to ensure that their knowledge of technical skills and ethical responsibilities remain up to date. If we become stagnant it could possibly mean falling behind in understanding implications of emerging situations and algorithms. An important part of self-development is to foster a mindset that values ethics, rather than treating them as it belongs on the back burner. Through experiences, collaboration, and study, we as engineers must encourage development for our peers and future generations. The duty to self is always ongoing, which will require humility, curiosity, and persistence in order to continue creating technology responsibly.

Judgment, management, and self are my personal core pillars of ethics that software engineers must uphold. Judgment preserves trust by guiding decisions to be made with integrity. Management influences teams and peers by setting a high standard. Self sets the foundation of a lifelong dedication to learning and to make responsible choices while technology evolves. Together, these pillars highlight why ethics is not an accessory, but in software development it's the backbone. Without these guiding values, technology may become destructive rather than beneficial, creating systems that exploit rather than supporting. By prioritizing ethics, software engineers can ensure that tomorrow reflects values worth standing by today.

References

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