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Data Structures 315-01

13 September 2023

How do we determine the amount of testing that is necessary when it comes to life saving equipment? That is a difficult question to answer how you balance the cost and time of testing with the value of human life. I do not believe that there is a justifiable reason to use the less reliable machine life-threatening machine to help more people. A machine should be tested as thoroughly as possible before using it on human subjects. Testing is expensive, companies must pay for that testing. There are charities out there that will help these companies pay for this testing, cutting the overhead costs for these corporations (Medical). I do not think I would use a machine that was not properly tested. That being said, I do have access to decent medical insurance and have had that for all my life so I do not know how I would feel if I was not in the situation where I would have to make a choice about it.

Regarding the certification process for software engineers, I do believe that there should be a certification process. Why should not software engineering products be scrutinized more than the software that goes into running them. I read through some of the certification processes that are required for engineers, and it does not seem like it would be a difficult task to tailor them to the needs of meet the needs of a software engineer (Regulation).

I know that it would be harder to become a software engineer, and maybe more people would not try to enter this career in this field, but would we not have better products because of these regulations and be better off as a society, for Proverbs 31:8-9 says, "Speak up for those who are dispossessed. Speak up, judge righteously, and defend the cause of the oppressed and needy."

In my opinion computer professionals should be held to standards, much like doctors and lawyers are. There should be one standard ethical code that a computer professional can look at. Do not get me wrong, the codes of ethics that have been established by the ACM (Code of Ethics - ACM Ethics) and the IEEE (IEEE Code of Ethics) are great but those are two different standards. Two standards that are optional unlike for doctors having to swear the Hippocratic Oath and lawyers having to swear to the bar association for the state that they practice in which are mandatory. With the amount of technology in our daily lives, and the automation that most people use in their daily lives, they might in fact be interacting with a computer more than they would be a lawyer or doctor, in fact they might be using that technology to interact with said professional. With that being stated, why are computer professionals not held to a mandatory code, there is an irony in that if you ask me.

Works Cited

- "Code of Ethics ACM Ethics." *ACM Ethics The Official Site of the Association for Computing Machinery's Committee on Professional Ethics*, 23 Sept. 2019, ethics.acm.org/code-of-ethics/.
- "IEEE Code of Ethics." IEEE, 2023, www.ieee.org/about/corporate/governance/p7-8.html.
- "Medical Research Charities a Federation in the Combined Federal Campaign (CFC)."

 Medical Research Charities A Federation in the Combined Federal Campaign (CFC),

 2020, www.medicalresearchcharities.org/.
- "Proverbs 31:8-9." *CSB Study Bible: Christian Standard Bible*, Holman Bible Publishers, Nashville, TN, 2017.
- "Regulation and Licensure in Engineering." *Wikipedia*, Wikimedia Foundation, 25 July 2023, en.wikipedia.org/wiki/Regulation and licensure in engineering.