Reflection on Computer Science Culture among students

I'm writing this on the plane as I depart for my 12-week software development internship in the Bay Area this past summer. The experience was enriching and transformative. While I deeply enjoyed my work, I found the general culture among students disturbing while I was there. In this essay, I will outline why I found the culture disturbing and the revelations I have come upon after spending 3 months there. I will convince you why we need to rethink the way we, as students and professionals of computer science, view computer science.

Materialism

To begin, I must acknowledge the pervasive materialism and emphasis on financial gain in the industry. Computer science is often seen as a field that offers rapid financial gain, and I concede this perception does indeed hold merit. The obsession with money isn't inherent to computer science; the field attracts people with this material obsession.

I observed this by noticing the vast difference in conversations with computer science students within the Bay Area and back at home (in the Midwest). Even among just computer science students, I have rarely discussed desired salaries or dream cars with them; however, this is almost always a topic that is often brought up within hours of meeting someone in the Bay Area.

I want to note that there is nothing wrong with wanting money. Instead, I want to draw a distinction between wanting money and obsessing over money.

Wanting money means treating wealth as one goal among many—balanced with fulfillment, relationships, and well-being.

Obsessing over money, on the other hand, stems from the pursuit of social status or extravagant lifestyles. This traps people in the "golden handcuffs," where they feel compelled to keep working, not out of passion or necessity, but to sustain a lifestyle that constantly demands more money.

Techno-addiction

Because of this one-dimensional view of computer science (as an industry to get rich quick), it is easy to get obsessed with creating new technologies or "cash-grab" applications in spaces where it doesn't fit. However, computer science is a tool that *can* solve some problems; it is not a silver-bullet solution that should be applied to every problem in the world. I find this to be the problem with many startups, especially in the realm of artificial intelligence. I argue that many startups fail to see real-world problems, and instead work to solve made-up problems, problems that do not require a technological fix, or problems caused by other technological fixes in the first place.

I want to clarify that I am not casting a net over all of artificial intelligence and saying it is entirely bad. There are many breakthroughs thanks to artificial intelligence; I am simply warning us to look at all the tools in our toolbox, not just artificial intelligence. In psychologist Chellis Glendinning's "Technology, Trauma, and the Wild", she describes this convoluted thinking as techno-addictive. We embrace "technological fixes" for other problems caused by previous technological fixes, even if it doesn't make sense. She compares this to the way alcoholics who drink alcohol to alleviate hangovers — a short-term fix that deprioritizes long-term benefits. In the same way we would recommend therapy to someone who may be

suffering from substance abuse, we should explore non-technological fixes for technological issues, which brings me to my final point.

Humanities

How do we know what these non-technological fixes are? How do we know when we should use artificial intelligence?

In an ethics class, my professor presented a thought experiment: a robot tasked with one goal — to produce as many paper clips as possible. Initially, it mined metal and converted it to paper clips. Then, it discovered a way to cut down trees to produce paper clips from wood. Finally, it found a method to turn humans into paper clips and began killing them to produce more paper clips.

The robot is indeed following its task to maximize paper clip production. But why do we find it problematic (or at least I hope you find it problematic) when it begins killing humans for paper clips? It's because of our humanity. It's because of our ethics. The things that make us human, which robots will never be able to replace. Even if it hinders efficiency, it is still important to ensure the robot learns to operate on our ethics.

Because of this it is important that we learn about our local and global communities and how our actions and technologies impact them. It is so common for STEM students to ignore the importance of humanities coursework, but I argue it is only more important to engross ourselves in these topics when dealing with such powerful technologies. These classes and topics provide us with insights into real-world problems and potential solutions, many of which are not technological in nature.

Artificial intelligence is not innately antisocial, but it certainly has the potential to be when used improperly and designers do not build them with humanity in mind. Focusing solely on superficial progress, such as money and status, neglects our human qualities and damages our humanity. Technology is not one-dimensional— as computer scientists, it is our moral responsibility to see our work in a more holistic manner of our humanity.