Prior to enrollment, I had briefly read the course description and my expectations for this course was that I would learn about the ways that food shapes our society and how it may affect our lives. My expectations are vague in a sense, but I think it’s natural since I do not have any background in the material that this course covers. As a computer science student, this course material does not coincide with the kind of content that I would normally learn. I believe, however, that it is important to build a strong and broad knowledge base. I have the belief that having range is important, as I feel that it allows one to connect knowledge and ideas from different fields in order to make informed decisions and solve problems effectively. This was my main learning goal when I decided to enroll in this course—to develop some knowledge in an area that I knew absolutely nothing about.

All in all, this course was not too challenging, although that is in part because I did not complete all the readings that were assigned. Furthermore, some of the readings used terms that I had never heard before, and did not have an intuitive understanding of, e.g., “food sovereignty”. This made it difficult to understand and absorb what I was reading. This was also the only course that required much writing. This semester, all of my other courses were related to math or computer science, so I did not need to write much at all for those courses. Writing well and fast is a vital skill to have regardless of background or interests. Nonetheless, I am not the fastest or strongest writer, which really frustrates me sometimes, and I find it easier to think about something more concrete like a math problem. Overall, I think that these aspects of the course were the most challenging parts for me.

Despite not having particularly specific expectations prior to enrolling in this course, this course was not what I expected. The course taught me about how little I knew about the food system as well as dispelled several misunderstandings that I held. I can say that this course definitely did change my understanding of the food system, and has made me more aware of the implications of my food choices. The readings were very informative and enriching, although I feel that I learned more from researching for the assignments and class activities/discussions from the readings—probably because I did not read all the readings in the list. The field trip to Queen’s Park was thought-provoking, and it was interesting to think about the Indigenous perspective towards the world, and ways that some things that are considered normal could potentially have destructive implications, e.g., the destructive effects of road salt infiltrating rivers. For my “Out in the Community” assignment, I watched “The Smell of Money” which was really eye-opening. I learned a lot about the concentrated hog farming situation in North Carolina, and the management of the hog waste was shocking to see.

One of the biggest misconceptions that I unlearned was the idea that the reason for food insecurity is not producing enough food. I knew that inequality made a difference in one’s food security, but I did not expect that we actually produce far more than enough food to feed the entire world. In 2012, we produced enough food to feed 10 billion people, still enough to feed the entire population today despite the population growth (Holt-Giménez, Shattuck, Altieri, Herren, & Gliessman, 2012). The root causes of hunger are poverty and inequality, not scarcity. Additionally, organic farming methods produce smaller yields compared to conventional farming methods but outperform in extreme conditions and with advances in agroecology. The solution to hunger may just be to prioritize smallholder farmers and focus on agroecological methods that promote sustainability (Holt-Giménez, Shattuck, Altieri, Herren, & Gliessman, 2012). Also related is the level of food insecurity in Canada, where 15.9% of households reported having experienced food insecurity in 2021 (Oldfield, 2022). Anecdotally, there is always food available in grocery stores and restaurants in Canada, so it follows that food insecurity in Canada would not stem from a lack of food availability but rather from barriers such as economic inequality, high costs of living, and limited access to affordable and nutritious food options. This highlights how systemic issues, rather than food scarcity, drive food insecurity even in wealthier nations like Canada.

Researching for the group project was very instructive as well. My group researched La Via Campesina, and in doing so, I strengthened my knowledge in issues regarding seed patenting, pesticide use, and Monsanto—now acquired by Bayer. In 2013, Monsanto controlled 27% of the commercial seed market and 90% of the soy seed market, and their control was further cemented by their seed patents (La Via Campesina). They have claimed that genetically modified crops are a solution to hunger, but there is no evidence that GM crops have greater yields than conventional (La Via Campesina). Furthermore, since the root cause of hunger isn’t scarcity, but rather poverty and inequality, it seems that GM crops will not be the solution for hunger for now. Instead, farmers have to buy patented genetically modified seeds, often multiple times more expensive, for traits such as herbicide resistance (Kovak, 2023). This makes it more difficult for smallholder farmers, especially to survive, and the fear generated by restrictive and convoluted patents (Scotten, 2024).

When I think about myself as a student in the computer science program, I see parallels between the course content that we’ve discussed and topics relevant to computer science. One topic that I believe is relevant to all of us is the development of artificial intelligence. Artificial intelligence has invaded our lives on all fronts; from filtering spam out of our emails, and facial recognition, to of course generative AI such as ChatGPT, Google Gemini, and Copilot. There are a range of concerns regarding these generative AIs including but not limited to: the ability to spread and generate misinformation and fake media; displacing jobs; and spreading bias and discriminatory ideas. However, I want to focus on one area of concern—the privatisation of AI technologies.

OpenAI, the company behind ChatGPT, despite its name, is not open-source (meaning source code is not publicly available to view.) There is an argument to be made for close-sourced AI models in favour of competition and faster development of AI technologies, but I am concerned with the parallels between the privatisation of AI technology and the issue of seed patenting. Patenting seeds makes it more difficult for smallholder farmers, who have to pay increased prices for seeds, or otherwise face legal action. In 2013, the U.S. Supreme Court ruled that Bowman, an Indiana farmer who reproduced Monsanto’s patented Roundup-resistant soybeans was guilty of violating Monsanto’s intellectual property rights (Marshall & Malakoff, 2013). Bowman had written to Monsanto looking for information about patent rights but never got an answer. Monsanto took legal action against a single farmer, and it set a scary precedent for other small farmers. Similarly, these generative AIs are very expensive to train, and when these models are closed-sourced as well, then it makes it so that only large companies with lots of money and access to data such as OpenAI, Google, and Microsoft are able to essentially control all the generative AIs that people are able to use. Smaller businesses as well as regular people are essentially forced to use these products from a select few large companies. In the future, we may have to pay royalties in order to use these products, which isn’t ideal. Not to mention, this gives these large companies a lot of power to manipulate ideas through the answers that their AI models give. This is similar to how the industrial food/agricultural sector spent hundreds of millions of dollars in order to manipulate media from 2009 and 2013 (Hamerschlag et al., 2015).

As I reflect on this course, I think that I personally would change the reading and discussion system. I’m not sure how engaged other students were in the readings, but for me personally, I practically gave up immediately after seeing the list. I think having maybe one required reading every class with the rest being optional might make the overall reading amount go up. It’s hard to say for everyone, but I think it would be for me. As a student, I feel that I have grown in the sense that I feel that I have a better understanding of the food system and more awareness of the social and economic situation. I also feel that I am better equipped to make informed choices in my everyday foods. This course is very different from most of my other courses, which focus on theoretical and mathematical problems. This course isn’t relevant to any theories or skills in computer science, but there are parallels between the ideas and concerns presented in this course and the ideas and concerns related to computer science. This course is also relevant to me as a consumer, who has to make informed choices when choosing what food to buy. All in all, I think this course has broadened my perspective on the complexities of food politics and its connection to global inequalities, while also pushing me to reflect on how my personal choices connect to larger systemic issues.

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