Understanding Computer Science Students' views of Military (and Military-adjacent) Work

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1 Background

The increased (potential) adoption of AI by militaries around the world has drawn the attention and raised concerns of both legislators [1, 2] and computer scientists working in industry[3, 4]. However, we do not have a good sense of the views of the field. More specifically:

- Are computer science students who are seeking jobs concerned about their labour being used for military purposes or used in military contexts?
- Are they aware of the working relationships between large US technology companies and militaries around the world?
- How does this knowledge (or lack thereof) affect their decision to apply to these companies?
- What would it take to make students reconsider working for companies known to apply for military contracts?

2 Methods

We conducted an online survey of computer science students at Canadian universities who are seeking full-time jobs (or recent graduates who have recently undergone their first post-graduation job search). The survey was approved by Queen's Univeristy's REB and conducted using Qualtrics.

To prevent participation bias, survey participants were invited to help computer science educators understand their preferences and views relating to their job search. In a similar vein, questions were structured to avoid order effects bias by asking more innocuous questions before the more sensitive questions. The survey was dynamic to students' responses, such that if a student was concerned about their labour being used for military contracts, yet applied to a company holding military contracts, they were asked if they were aware of this and, if so, why they made an exception.

3 Results

3.1 Participants description

Note: the survey is still active and collecting responses until April 2025. Our respondents hailed from the University of Toronto (27), Queen's University (11), University of Waterloo (9). We had less than 10 respondents from Simon Fraser University and the University of Alberta combined[1]. Our respondents were White (21), Chinese (15), and Other (18). Most of the respondents self-identified

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[1] We did not report counts for small cells to maintain the privacy of respondents in line with the approved REB protocol.

as Male (33), 18 as Female, and 2 as non-binary. As we were looking to understand the real-world decision making processes of students seeking jobs, we excluded any respondents from students below 4th year leaving us with 38 responses to analyze.

3.2 Overall Considerations

Respondents ranked social and ethical concerns as amongst the lowest considerations when looking for jobs behind remuneration, location, work-life balance, and professional development opportunities.

Concerning the use of their labour for military purposes, 40% of respondents had no concern (though this was driven by the plurality of Male respondents (58%) having this view while only 17% of non-male respondents had no concern regarding military use).

For students who indicated some level of concern regarding military work but had applied to a company with some connection to military work we asked, the majority (46%) were not aware of the relationship between Big Tech and the US and Israeli militaries (up to 80% for non-male respondents). However, for those without previous knowledge, none of the students reported planning to change their applying to Big Tech with this new knowledge.

Justification for not changing job-seeking decisions varied from the perception of job scarcity (*"If I were to not apply for any job that I believed took at least one unethical action, I think I would have a very difficult time finding any job at all"*) to perceived social or personal benefits outweighing perceived harms.

When compared against other possible ethical concerns arising from the use of their labour, use for military purposes had the highest number of responses unconcerned (40%) compared to use for labour exploitation (13%), use for privacy violations (17%), use for environmental harms (20%), and use causing mental health harm (33%).

4 Limitations

Our work has multiple limitations. First, our small sample size makes it difficult to draw strong conclusions from our data – larger surveys will need to replicate our work to ensure consistency. This is especially the case for sub-group analyses. Additionally, our work is focused solely on Canadian computer science students which limits generalizability of results.

5 Conclusion

Understanding students' views to the above questions is vital for a myriad of roles, be it educators looking to study the effectiveness of ethics courses, industry trying to gauge incoming worker sentiments, or military recruiters attempting to understand possible challenges.

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References

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