Teaching Ethics & Activism in a Human-Computer Interaction Professional Master's Program

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ABSTRACT

We report on a new ethics course for industry-bound students in a Human-Computer Interaction (HCI) professional master's program. The goal is to prepare students to think critically about the technology they design and to drive ethical change within their future organizations. Unlike research-oriented graduate programs, students in professional master's programs primarily seek to enter industry, oftentimes making a career change from a non-computing area. Thus, in addition to supporting students' ethical reasoning skills, ethics pedagogy needs to also help students develop core skills in the technical discipline and be grounded in real-world situations to align with their practice-based goals. To achieve this, we structure our course around three principles: survey (introducing contemporary ethical issues in computing and their social context), stakeholders (considering the multi-faceted nature of ethical decision-making), and skills (developing the technical and communication skills needed to drive ethical change). We hope that our curriculum and reflections will help other instructors connect ethics pedagogy to professional practice in the classroom.

CCS CONCEPTS

 \bullet Social and professional topics \rightarrow Codes of ethics; Computing education.

KEYWORDS

ethics, professional training, HCI, UX design, project-based learning, computing education

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1 INTRODUCTION

As the social impact of computing grows, ethics and responsible computing are becoming increasingly significant parts of computing education. For example, many courses in computing degree programs integrate ethics into technical curricula [3, 15] (e.g., in an algorithms course). Others address ethics within a specific topic, such as AI, robotics, and cybersecurity [14]. These approaches can help motivate the importance of ethics for students and illustrate how ethics and technical curricula intersect.

However, understanding the significance of ethics is just one part of the broader toolkit students need to drive ethical change in their future organizations. Existing approaches to teaching ethics in computing are limited in preparing them to practice ethics within their future organizations (e.g., technology companies). Prior educators and researchers have considered how to bridge the academiaindustry gap in teaching technical skills [16] and how to relate ethics concepts to different computer science (CS) areas [6]. However, we are not aware of prior work that aligns *ethics* pedagogy with industry perspectives; an approach that situates ethical skills in the context of a technical profession practiced within profitdriven organizations. To address this limitation, we developed an ethics course for a Human-Computer Interaction (HCI) professional master's program at the University of California, Santa Cruz, in their Silicon Valley Campus.

Being in the heart of Silicon Valley, we recognized that while many see it as a bastion of technological innovation, it is also the site of many instances of harmful technologies that disproportionately affect underrepresented populations of users. Many of these harms cannot be addressed by designing or building more "ethical" or "responsible" technologies to replace or improve the problematic ones [2]. Most ethical dilemmas often do not have clear technological solutions; underlying many of them are conflicting motivations, decisions, and power structures [4, 29]. Addressing these issues, especially over the longer term, may require other types of work, such as advocacy, union organizing, and collective resistance, especially when workers' values and company culture are misaligned.

UX professionals are in a unique position to drive this kind of change within their organizations, as they already see advocating for the well-being of their users to be a part of their role [27]. Therefore, we integrated a social justice [7, 8] vision into our program. Nonetheless, we felt that students did not understand the *pragmatics* of promoting social justice-oriented within the confines of corporate America, particularly the tech companies in Silicon Valley that a significant fraction of them want to work for upon graduating. For example, in the U.S., workers rely on healthcare provided by their employees and international workers rely on their company's sponsorship of their visa. While part of a privileged

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group, ironically tech workers are bound up with their companies in ways that do not always afford them the ability to "shake things up" and vocally promote social justice [25]; some workers, for example, may do more quiet forms of activism to seek to change company culture [17]. Our course fills this gap.¹

Three course principles—*survey*, *stakeholders*, and *skills*—engage students in critical reflection on the different motivations and social contexts underlying contemporary ethical issues.

- 1. **Survey:** *Socially contextualizing ethical issues*: We survey current ethical issues (e.g. biases in AI systems) and their connection to social issues. Students read research papers and news articles, and converse with ethics experts and practitioners from industry and academia. These include union organizers, researchers, designers, and software engineers.
- Stakeholders: Understanding ethical decision-making: Technology design decisions are not made in a vacuum; they involve multiple stakeholders with different (sometimes competing) goals. Our in-class activities and assignments challenge students to consider the complexity of ethical decision-making.
- 3. **Skills:** *Developing technical and communication skills:* To drive ethical change, students must design technology responsibly *and* communicate their ideas effectively. Through assignments and a term project, they develop research and design skills as well as oral, written, and visual communication skills.

In this experience report we present insights from teaching our course in Spring 2022 and Winter 2023. Our reflections and course materials will help other instructors better align ethics education with students' practice-based industry goals in programs where a significant percentage of students go into industry (e.g., professional graduate programs and undergraduate CS programs). Materials for the course are available on our website: https://sites.google.com/ ucsc.edu/hci220w23/home

2 RELATED WORK

Prior work in the CS education research community has focused on embedding ethics into technical curricula within computing degree programs. Much of this work has focused on teaching ethics within core computing courses [3, 5, 20] such as through Embedded Ethics programs [15] or on developing full-length ethics courses that teach ethics in the context of particular CS topics [1, 6].

Within both approaches to ethics education, there has been a strong focus on project-based, or active, learning. For example, Dean and Nourbakhsh developed an Ethics and Robotics course where students create ethics modules to embed within other CS courses at their institution [6]; Skirpan et. al., present in situ learning activities that promote ethical thinking in the context of an undergraduate human-centered computing course [21]; and Reich et. al., present an interdisciplinary approach to teaching ethics by bridging the humanities, social sciences, and CS [19].

Despite these efforts, there are still many open problems in developing ethics pedagogy, such as addressing barriers to instruction [23] and incorporating topics that warrant further attention [9]. Another problem is bridging classroom-based ethics curriculum with industry practice under organizational constraints and affordances. Our course aims to fill this gap, inspired by HCI research investigating strategies and tools used by industry tech workers to make ethics-related decisions [12, 28, 30]. For example, Gray and Chivukula identified the ethical principles and values that UX professionals rely on to make decisions [11]. And Wong described how UX professionals try to reshape their organizations to better align with their social values [31]. This work emphasizes that there are intentional processes UX professionals follow to enact ethical change within their organizations, motivating the need for students to develop relevant skills. This work forms the basis of the "activism" component of our course, which we align with methods such as active learning [18] and reflection [10].

3 COURSE OVERVIEW

Our course prepares students to think critically about the technology they contribute to, consider the role of UX professionals as agents of ethical change, and equips them with the tools to make ethics decisions. Students engage in in-class activities, assignments, and a 10 week term project. In this section, we provide context on our students, learning objectives, course structure, and assessments.

3.1 Program and Student Background

Our HCI master's program is a new (2 years old at time of writing) 5-quarter terminal degree program. Its goal is to train socially responsible, reflective, and professional UX professionals. Most students seek jobs as product designers or UX researchers. Our curriculum covers many topics typical to HCI master's programs including the literature, theory, and methods of HCI and concludes with a 2-quarter real-world capstone project involving user research, design work, and stakeholder engagement. Students take our ethics course in their first year (second quarter). Our program recognizes that close ties to industry are crucial to students' success: industry mentors are paired with students to provide professional advice on job interviews, portfolio creation, and industry trends in UX tools and methods; this is advice that academic faculty are often ill-equipped to provide. Our program's goal is to have a steady state of approximately 25 students per year. In year one, 10% of students were international and 55% were women; in year two, 60% were international and 72% were women. Students come from diverse undergraduate degrees such as computer science, engineering, cognitive science, psychology, sociology, humanities (e.g., philosophy, English), and architecture.

We ran the course twice: in the Spring 2022 and Winter 2023 quarters. In 2022, the course was an elective. Seven of 11 students enrolled in it, and four completed it. In 2023 the course was required, so all 22 students in the cohort enrolled and completed it. In this report, we focus primarily on our second offering. However, when appropriate, we discuss how lessons from our first offering informed our design of the second offering.

3.2 Learning Objectives

By the end of the course, students should be able to:

1. Discuss the social ramifications of the development and adoption of technologies.

¹We orient our course towards the US corporate environment because we teach at a US institution and many of our students, while from diverse international backgrounds, have goals to obtain industry positions at US-based companies.

Teaching Ethics & Activism in a Human-Computer Interaction Professional Master's Program

Week	Topic
1	The impact of design
2	Ethical decision-making: dark patterns
3	AI ethics
4	Tech policy
5	Privacy & surveillance
6	Silicon Valley tech culture & labor activism
7	Labor organizing
8	Ethics and activism in HCI research
9	Ethics and activism in UX practice
10	Final project work
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Table 1: The course schedule.

- 2. Identify opportunities for UX professionals to drive ethical change within their organizations.
- 3. Critically analyze tech worker movements through the lens of ethics, diversity, and power dynamics (e.g., race, gender).
- 4. Identify the methods and pragmatics of labor organizing.
- 5. Apply human-centered design methods to identify ethical issues.

3.3 Course Cadence

Over 10 weeks, the course met twice a week for 1.5 hours each day. Each week had a specific topic: earlier weeks focused on current ethical issues (survey) (§4.1) and later weeks focused on how ethics may be practiced beyond technical solutions. Table 1 contains our schedule of topics. Throughout, our activities emphasized the stakeholders (§4.2) and skills (§4.3) principles.

3.4 Student Assessment

The term project was the largest assessment, 40% of students' overall grade: a proposal (10%), mid-quarter report (10%), final deliverable (15%), and peer assessment (5%). The rest of the course grade comprised: reading reflections (15%), two assignments (15% each), in-class participation (10%), and feedback form completion (5%).

4 THREE PEDAGOGICAL PRINCIPLES

We now discuss the design of the course through the lens of our three principles: survey, stakeholders, and skills. In the subsubsection headings, we denote whether principles were addressed through in-class activities, assignments, projects, or guest speakers.

4.1 Survey

Our first principle is for students to understand current ethical issues, so that they are well-versed in these topics when they join industry. We chose three topics based on conversations with ethics experts in industry and academia: dark patterns in UX design, AI ethics, and privacy & surveillance. We describe each below.

- **Dark Patterns in UX Design**: Overview of dark patterns [13] and mitigation approaches in design, policy (e.g., regulation) and consumer education.
- AI Ethics: Biases in AI systems and their impact on users and non-users (e.g., labor conditions of data-workers).

• **Privacy & Surveillance**: Privacy implications and surveillance potential of tech (e.g., of in-home assistants), and the privacy rights of research subjects.

Each unit lasted one week (two class sessions). Each week comprised a reading discussion (day 1) and an activity (day 2).

4.1.1 Readings, Reflections, & In-Class Discussions. Before day 1 of each unit, students completed 1–2 readings; typically one research paper and one general-audience article or essay. Students wrote a reading reflection where they argued positions about three things they found interesting and one thing they disagreed with in the readings. Thus, reading reflections supported both in-class discussion and written argumentation skills. Students also wrote at least two discussion questions.

We experimented with two discussion configurations: *whole-class* and *group-first*. In the *whole-class* configuration, the students and instructor sat in a circle. The instructor guided the discussion and sustained conversation by synthesizing themes and asking follow-up questions to students' comments. In the *group-first* configuration students sat in groups of four. The instructor posed a discussion question from students' reading reflections, the students discussed in groups for 5 minutes, and the whole class discussed for 10-15 minutes. The cycle continued with a new question.

4.1.2 In-class Activities. On day 2 of each unit, students participated in in-class activities. One activity (for dark patterns) was created by the instructor. The other two were adapted from other researchers and educators. Below we describe each activity.

Dark Patterns Skits (Dark Patterns). To think about the different stakeholders involved in making design decisions and how these contribute to ethical issues, students wrote and performed a dark pattern origin skit. Working in groups, students: (1) picked a digital technology, (2) identified a dark pattern, (3) identified which actors were involved in the technology's design, (4) brainstormed potential conversations they may have had based on their goals, and (5) wrote a story for how their identified dark pattern was decided upon and act it out in 2-4 scenes. Each scene focuses on different points in the project's life cycle that illustrate different aspects of why and how that dark pattern was created (e.g., original sales pitch to manager, user studies, team setting measurable goals).

Timelines (AI Ethics). To teach students about speculative design as a tool for proactively envisioning potential harms from new uses of AI systems, we adapted Richmond Wong's and Tonya Nguyen's Timelines activity [32]. In our adaptation, students worked in groups to brainstorm future AI technologies and create timelines with news headlines describing how those technologies might be adopted. In the final 15 minutes, groups presented their timelines and discussed the approaches they believed technologists, policy-makers, and users should take now to mitigate the potential harms of the AI systems they envisioned.

Privacy by Design Game (Surveillance & Privacy). Students played Katie Shilton's Privacy-by-Design game to practice deciding what data to collect from users². In the game, students role-played different stakeholders (developer, project manager, UX designer) involved in these decisions within a hypothetical health

²Privacy by Design Game: https://evidlab.umd.edu/privacy-by-design-the-game/

software company. The students took notes about their discussions and resulting tradeoffs. In the last 15 minutes, groups shared their decision-making process with the rest of the class.

4.1.3 In-class Speaker: Issues in Tech Culture. Ethical issues are intrinsically connected to social issues of power and marginalization [22]. These challenges are present within organizations and both affect workers' experiences and shape the product decisions within the company [25]. Therefore, we wanted students to think critically about the sociocultural dynamics within the types of organizations they may be a part of and how these relate to the ethical issues we covered in the three earlier units. Thus, we invited guest speakers who have grappled with these issues in the tech industry.

In the Spring 2022 offering, our guest speaker was research director at an AI research firm. During her visit, students discussed with her the challenges people of color face in technology organizations, how organizations can encourage diversity in an authentic way, and how collective action efforts that have led to impactful change within tech organizations.

In the Winter 2023 offering, our guest speaker was a postdoctoral fellow in our department with experience researching the experiences of immigrant tech workers within organizations. She introduced students to the idea of caste [24, 26] and how it shapes tech culture in Silicon Valley and South Asia, where it emerges from. Following the guest speaker's lecture, students and the speaker discussed who can and should do anti-caste work and how cast discrimination intersects with feminist activism.

4.2 Stakeholders

Our second principle focused on recognizing the diverse perspectives and motivations of the stakeholders involved in making decisions within tech companies. This allows students to better identify the feasibility of potential solutions to ethical challenges. For example, considering the motivations of stakeholders allows students to pitch design ideas to stakeholders in ways that speak to their goals. Students practiced identifying stakeholders and their motivations in the Dark Patterns skits and the Privacy by Design Game (§ 4.1)

4.2.1 Assignment: Identifying Ethical Issues & Stakeholder Letter. In the first assignment, students analyzed an ethical dilemma in a piece of technology of their choosing, brainstormed potential stakeholders affected, and wrote a 500-word letter to one of the stakeholders arguing a position that considers the motivations of the letter recipient. Students were given the following example in the assignment instructions to help them get started: You might analyze Adblock Plus, focus on whether it should allow "acceptable ads" by default, and write a letter to the co-founder of the company that maintains it, Wladimir Palant. Students completed this assignment individually. This assignment built on the stakeholder identification skills students developed through the Dark Patterns Skits and Privacy by Design Game and was inspired by material from Keith Winstein's CS 181³ at Stanford, and Sarita Schoenebeck's SI 431 at University of Michigan.⁴ Below are example topics from 2023:

• To the CEO of Bank of America suggesting changes to allow users more control over their data in the bank's mobile app.

- To the Amsterdam city council arguing for restrictions to the number of homes that can be rented on Airbnb to reduce negative impacts on the local housing market.
- To the California State Medicaid director to propose a redesign of the directory webpage to make health plan information on the site more accessible to beneficiaries.

4.3 Skills

Our final principle focused on helping students develop and apply skills to promote ethics within their future organizations or engage in various forms of activism centered on tech ethics. We invited guest speakers with a range of diverse labor organizing experiences, developed in-class activities and assignments to promote communication skills, and had students complete a term project where they developed and practiced technical and communication skills in the context of ethics beyond the classroom.

4.3.1 In-class Speakers: Labor Organizing. Sometimes, tech workers collectively organize to promote ethical change in their organization. While some of our students might have known some basic terminology, we expected that most would be unfamiliar with the details of the unionization process and with the trade-offs of participating in unions.

To discuss the pragmatics of collective action in tech, we invited guest speakers with diverse organizing experiences: one in 2022, and two in 2023 following a very positive response from students in 2022. Our 2022 speaker, a tech worker-organizer, discussed recent organizing efforts in tech, how collective action affects the industry, and how tech workers can educate others about ethical issues.

In 2023, our speakers focused on the role of technology in organizing. The first speaker, a researcher of data-driven approaches to worker advocacy, spoke about how labor unions make decisions about the technology they design and the data they collect. The second speaker, a user researcher and labor organizer, challenged students to think about the implications of tech startups creating tools for labor organizing, including the potential conflict arising from power differences between different stakeholders involved, building on some of our earlier course themes.

As some of our guest speakers said, educating others is a key part of activism and promoting ethical change. Therefore, we designed an in-class activity and assignment to support students' visual and oral communication skills, respectively. We describe these in the two subsubsections that follow.

4.3.2 In-class activity: Flier Design. In this activity, students worked in groups to create a flier that visually communicates a position or argument on one of three issues at the intersection of ethics and tech policy: California Proposition 22 from 2020^5 , Section 230 of the US Code⁶, and GDPR article 17 on "the right to be forgotten." The instructor presented a brief overview of these policies, their motives, and tech policy more broadly before the activity began.

Students were asked to imagine that their flier would be in a workplace break room, where people might only look at it for a few seconds. *In those few seconds, what do you want to communicate?* Therefore, we challenged students to communicate their position

³Stanford CS 181: stanfordcs181.github.io/

⁴University of Michigan SI 431: s3-us-west-1.amazonaws.com/umsi-class/431.pdf

 $^{^5\}mathrm{A}$ ballot proposition in California concerning labor law for app-based driving.

⁶A law that protects online platforms from liability from user-generated content.

with as few words on their flier as possible. Groups spent 30-45 minutes researching their topic before designing their fliers and presenting to the class.

4.3.3 Assignment: Research Paper Presentation. In a homework assignment, students worked alone or in pairs, to (1) identify a research paper related to design, activism, or tech ethics, (2) prepare a five-minute presentation on the paper and how it might apply to UX professionals, and (3) present to the class. This assignment developed the students' oral communication skills.

4.3.4 Term Project. Students completed a 10-week project in which they applied technical user-centered design and research skills to: identify an ethical issue in tech, prototype a potential solution, or further understand the problem. Projects followed the user-centered research process: students iteratively worked to understand users' needs, analyze data, design solutions when appropriate, and obtain feedback on their results or prototype. In groups of 3-4, students wrote a project proposal (due week 3), a midpoint report (week 7), and prepared a 15 minute presentation (week 11; finals week). We gave students broad categories for their projects to help them brainstorm ideas. We required them to use at least one user-centered research and design method in their projects (e.g., interviews, content analysis, participatory design) and to engage individuals outside the HCI master's program in the data collection or evaluation of their project. Below are example topics from 2023:

- Students sought to understand the relationship between tech and non-tech workers in the San Francisco Bay Area. They interviewed both groups and made a zine that illustrates how technology impacts individuals from each group to promote greater understanding and conversation between them.
- Students analyzed the content of public online worker forums to understand how power and identity shape workers' experiences and career growth within tech companies. They used their analysis to adapt the "Chutes and Ladders" board game into a corporate version that challenges players to reflect on ethical issues in workplace environments.
- Students made an interactive website that teaches consumers about dark design patterns and how to avoid falling for them. Their site was developed through interviews with adult participants and several rounds of user-testing.

5 DISCUSSION

We obtained course feedback through official and unofficial channels. After the course, 72% of students filled out our university's anonymous course evaluation. We asked the students for further unofficial feedback at the course midpoint and conclusion, through Canvas. All students completed our unofficial surveys.

In this section we summarize qualitative student feedback from both the official and unofficial course evaluations to describe what worked well and areas where the course could be improved in the future. We do not report an overall numerical course rating because our university does not collect these. More generally, since this is an experience report rather than a research paper, we did not conduct a rigorous assessment of course outcomes.

5.1 What Went Well?

5.1.1 Discussing culture in the tech industry. We expected that having these discussions might be challenging and were unsure of whether students would understand why they are important to cover in an ethics course. We were pleasantly surprised by how well students engaged with the guest speaker, the depth of their questions and discussion points, and their interest in the topic.

[The guest speaker's] session was amazing in a way that it was unique and a new topic for some of us. Learning about the caste system and how it affects tech was very interesting and surprising at the same time. Living in the 21st century, it's hard to imagine that such issues still exist in our everyday lives.

5.1.2 Al ethics guest lecture. The AI ethics guest lecture was one of students' favorite lectures of the whole course. Students enjoyed the lecture for a few reasons: (1) they appreciated being able to interact with someone from industry with a career they could imagine some day having, (2) they enjoyed learning about the technical underpinnings of AI systems in the context of ethics, and (3) it touched on timely topics. In their course reviews, many students expressed that they were especially surprised to learn about the working conditions of data workers: *"It was a topic I had not considered before when thinking about ethics in tech*."

5.1.3 Small group discussion format. During the first group discussion, we noticed that students were not participating as actively as we had hoped. We thought that perhaps students did not feel confident enough to share their ideas in the large group setting or needed more structured discussion questions from the instructor to prompt conversation. When we switched to the small group discussion format, where the instructor presented discussion questions and gave students time to discuss them in small groups before sharing with the class, participation increased significantly.

5.1.4 Variety of in-class activities. Students were positive about the variety of in-class activities. Many described them as *"engaging."* They especially liked the hands-on nature of our activities:

I loved all the in-class activities. I learn better when doing and trying things out. When I'm doing an activity and working with others, I feel more engaged and I can apply my knowledge and what I'm learning to something.

Some students also commented on how in-class activities were tangible exercises they could imagine sharing with co-workers in a future workplace setting.

5.1.5 Regular student feedback. We gave students several opportunities to provide feedback and encouraged them to talk with the instructor or TA if they had concerns. We offered an anonymous google form for students to provide feedback at anytime, as well as an anonymous mid-point and end of quarter survey on Canvas. We made changes to course content multiple times based on the feedback we received. Students responded very well to this:

I really appreciate how the instructor and TA take our feedback very seriously and adjust the schedule of the course accordingly. I understand how hard it is to structure a course of such a vague topic like ethics.

5.2 What to Improve?

5.2.1 Set discussion norms during the first class session. In 2022, we conducted a norm-setting activity during the first class session where students collectively wrote values they wanted to uphold when discussing and working with one another (e.g., leave room for mistakes, do not see criticism as an attack, evaluate your tone, etc.). Students worked in small groups to brainstorm values and descriptions of them before collectively writing them into a shared Google Document. The document was then linked in the course syllabus for easy reference.

In 2023, we ran out of time during the first class session and therefore, did not conduct the norm-setting activity. In retrospect, conducting the activity might have improved the quality of the discussions and students' level of engagement. In the future, we will prioritize conducting this activity during the first session, especially given that some students suggested such an activity:

Having ice breaker activities/setting expectations more at the start of the quarter-> creating an environment where people feel comfortable sharing and establishing some norms for this at the beginning could make people more likely to share and might help with more engaging class discussions.

5.2.2 Reduce reading reflection load. At the half-way point of the course, students felt there was too much reading; this negatively impacted their ability to complete other course requirements:

The assignments and the reflections are too heavy and take a lot of time...I am afraid that if this continues I should not end up creating something that is not worth a quarter long [for the final project].

In response, we cut down the amount of reading reflections by no longer requiring them for guest speaker lectures. The goal of the reflections was for students to come prepared to actively discuss with the speaker. However, we noticed that despite not having done a reading reflection, students were just as engaged during the discussions in the second half of the term (without the reading reflection) as they were in the first half. In the future, instead of a long written reflection, we might have students write a few sentences on an interesting point in a Canvas thread and respond to at least two classmates' posts in advance of the discussion.

5.2.3 *Make discussion takeaways more tangible.* Some students felt that reading discussions were too theoretical; while interesting, they were not sure how to apply the outcome of the discussion:

I enjoyed the discussion topics relevant to the readings and activities in class. However, I wish we could explore best research practices and different on-field research methodologies more in-depth.

In the future, we might end paper discussions with takeaways that could be applied to students' final project. We might also better connect reading material to in-class activities. For example, one student suggested creating an activity applying trauma informed design principles into the physical design of an object to accompany a discussion on trauma-informed research.

5.2.4 Shift labor organizing unit earlier in the quarter. Many of the term projects focused on the topics from the first half of the

quarter, when students were proposing ideas. In future iterations of the course, we would like students to have the opportunity to incorporate more ideas from labor organizing into their projects. One way to do this is to introduce labor organizing earlier in the quarter. However, this is also one of the topics students struggle with the most since they usually come in with limited prior exposure. Therefore, in future iterations of the course we may split labor organizing into two weeks: introduce the topic earlier in week 3 and revisit it in week 7 or 8 to connect it with earlier course content.

5.2.5 Incorporate more examples of real-world ethical dilemmas. Similar to feedback about the in-class discussions being too theoretical, some students felt that the class overall was too theoretical. Some students wanted to have more examples of solutions to ethical challenges that consider both user and business needs.

> I wish we could cover more ways in which to navigate ethical situations. Having people in the industry talk about their ethical experiences in the industry and how they navigated them would have been helpful for us.

Given the highly subjective nature of ethics it is difficult to give students a formula for what they should do when faced with ethical issues. However, in future iterations of the course, we may give students more examples of scenarios where individuals had to make decisions around ethics and incorporate case studies where students will reflect on what they would do. We will draw these from current/recent events and by inviting guest speakers who can speak about personal experiences grappling with ethical issues.

6 CONCLUSION

Ethics education in professional computing degree programs presents an opportunity to address an important, but challenging, gap in computing ethics education: aligning ethics pedagogy with industry perspectives in profit-driven organizations. In this experience report we present our approach teaching ethics in an HCI professional master's program to industry bound students. Our class is centered around three principles – survey, stakeholders, and skills – to both address contemporary ethical issues in design and the potential for UX professionals to drive change in their organizations. While there are several areas where we can improve the course in the future, we are motivated by students' desire to understand the intersection of ethics and social issues and the pragmatics of promoting social justice through labor organizing. We encourage computing education researchers to draw on our experiences when teaching ethics to industry-bound students.

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