I write to let you know that I have requested the CS Department to cancel my Spring-term 189L, "Cryptography and Surveillance". I have been struggling with this decision for the last two weeks.

This news may inconvenience or disappoint some of you, and for that I am sorry. I know too that classes, even online ones, might be a way to lend support at a time when this is needed. Yet I also know that I was dreading teaching this class, something I have never felt before. In the end, I decided that I should listen to that feeling.

I wanted to share with you my thoughts surrounding this decision.

Spring 2020 will be a strange time for all of us. Both students and faculty will be distracted, anxious, and stressed. It is a poor environment for conventional learning (but possibly a good environment for personal growth). My recommendation to UCD students is, if you can, to temporarily cancel or withdraw from UCD. If it's an option, you may wish to live with your family. The university should be doing all it can to make cancellation/withdrawal an easy choice. I doubt it will.

My ECS 189L was to be half technical and half sociopolitical, a virtually unknown combination for our department. It was to have an implicit and disturbing message. I had hoped you'd come to that message on your own, synthesizing the material we covered. Since I won't be teaching the class, maybe I should try to explicitly enunciate what I hoped you'd get. An understanding that capitalism, mass surveillance, modern warfare, the suppression of dissent, and the manipulation of human beings are being woven into a seamless system of people and machines. That state and private surveillance have merged. That the apparatus is increasingly powered by ML. That many CS/CSE students will graduate from UCD and go to work for the military-industrial-surveillance complex, taking jobs at places like Facebook and Google. That cryptography—the field I spent my career studying—might seem to offer a set of tools to stop our dystopian descent. It promises techniques for private communication, private web browsing, public ledgers, and more. But this vision is naïve. Crypto is basically impotent—and, like most of CS, culpable. There is no solution within the technical realm.

Covering this would be challenging under the best of circumstances. The crypto stuff can get pretty hard. Beyond that, the entire story runs strongly against the pro-technology narrative you live and breathe. It also runs against your self-interest. "It is difficult to get a man to understand something when his salary depends on his not understanding it", Upton Sinclair succinctly explained. But on top of all these obstacles, now I would have to teach this material in an online format when I never before taught <u>this</u> class, and never before taught <u>any</u> online class, and when

I detest the technology I'd have to use. To add to that, I'd be teaching a deeply depressing topic to emotionally vulnerable students. The entire enterprise felt unwise.

And there are other concerns. When this episode finally ends, what will be the lesson learned by campus "leadership"? That online instruction works, well enough, for virtually all classes, even without a whole lot of planning. In love with efficiency—narrowly construed—UCD Inc. will claim a victory. I do not want to contribute to this polemic. I would rather be a voice that says No, this just isn't going to work.

In truth, I was already unhappy about this 189L because of low enrollment. The department had projected 100 students, but only 29 enrolled. In comparison, when I taught ECS 127 (cryptography) last year, about 120 enrolled. Why would a class on cryptography-and-surveillance get a quarter of the enrollment of a class on cryptography alone? There are multiple reasons, but one is that few CS/CSE students actually <u>want</u> to explore the ethical or sociopolitical dimensions of our work. It dilutes technical content, consumes time, and requires skills in short supply—by faculty and students both. And the payoff? Computer scientists who question the social value of technical work will be <u>less</u> employable than before.

This spring the CS department will teach <u>six</u> classes related to AI/ML—the area of CS most intimately connected to mass surveillance and behavioral prediction. Most are large classes with long waiting lists; <u>this</u> is where students want to be. When I ponder this reality, maybe I should feel the urgent need to help students question the AI/ML mania. But what I actually feel is how out-of-step I am with the world that I inhabit.

Before I say goodbye, let me try to contextualize this pandemic in a way that might be different from what you've heard.

I have heard many people say that we are at an unprecedented moment in time. Which is true, to an extent. But modern man is forever creating one unprecedented circumstance after another. Perhaps we should see COVID-19 as a dress rehearsal for meltdowns to come; or as one chapter in the book we are authoring on how the world pushed back from our reckless assault. The Camp Fire, which blanketed UCD in unbreathable air in 2018, was a prior chapter. The climate crisis will bring many more chapters, and more deadly ones, until things <u>really</u> go sideways and collapse.

Zoonotic diseases mostly come from our consumption of animals, domesticated or wild. From our incursions. Our frivolous food preferences cause extraordinary suffering, a ruined environment, and decreased human health. Perhaps this might be a good time to adopt a plant-based diet?

There are some students who don't take the current problem seriously. (One colleague circulated a disturbing article about how Cornell students were off partying.) There are lots of reasons. Young people routinely think themselves invincible. They like to appear to question authority. Then there's that dogged American belief that technology will find an out. Plus a belief in US exceptionalism. And the whole anti-science, post-truth skepticism that has Trump as its cheerleader.

I think you should take the pandemic seriously. It is not just as an obstacle to your doing what you want. It is a time to prioritize the welfare of others.

We are not living in apocalyptic times. But our assault on the earth is bringing forth a fitful, multi-decade collapse. Mostly an uneventful one, but increasingly to be punctuated by drama. Hurricanes, fires, economic meltdowns, pandemics, food shortages, water shortages, authoritarianism, violence, and failures of the technological systems we now need to live.

Ask yourself where and how you want to spend this time. I myself remain unsure. But trying to remotely teach a depressing topic to an already frazzled group of kids did not feel like the right answer.

I am happy to hear from any of you, which we can do by email, Jitsi, Zoom, or Wire. In fact, I'd be happy to setup a weekly meeting to check in on how you're all doing—the students that would have comprised our little class. If there is interest, please let me know. In general, please feel personally invited to stay in touch.

Stay healthy and well,

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