Good morning, everyone. Thanks, Jim, for the introduction.

Graduates, how are you doing?

(Come on, this isn't the *8:30am* graduation. Graduates, how are you folks doing?)

I hope you're feeling well, because congratulations, you made it. You took classes, navigated degree requirements, and some of you wrote a thesis. The registrar said you could graduate, so you picked up a cap and gown from the bookstore. Right now you've got a tassel on your cap. A word of advice: pay close attention to the instructions for that tassel. You're supposed to turn it a certain way; never turn it the opposite direction. If you do, it's like an undo button. Your degree vanishes! You have to start all over.

Here's another undocumented feature: if you turn it the correct direction and you keep turning all the way around, past a full circle, *you get extra degrees*! No one knows where they come from. Some people hear a strange grinding noise, but you can ignore that. Only one tassel has ever burst into flames from turning too far. This procedure is how I got three bachelor's degrees, and then the university stopped me from turning my tassel any further.

I did get three, fourteen years ago, when I graduated from Virginia Tech. I think a lot of graduation speakers say that it feels like just yesterday, but it doesn't to me. It feels exactly like 1.4 decades. Between now and then, a lot of things happened. I earned a master's degree, and then I got a PhD. My college girlfriend and I stayed together, through six years of long-distance relationship, and then we found a way to live in the same place. Soon after that we got married. I worked at four different universities, and I held visiting positions at three more, all together covering four continents. I visited 36 countries and somehow took exactly 250 commercial flights. I also calculated that I spent roughly 700 hours, or one month, onboard planes. In case that sounds glamorous, I'll take some of the luster off of it: the vast majority of those hours were in economy class.

This kind of information doesn't go far in a graduation speech, though. All of that sounds like results, and when I thought about what I should tell you today, I thought I should spend more time on process. I should talk about struggle, failure, and endurance. In particular, I've accumulated a lot of failure. You can imagine a collection of it shaped like a pile of gravel, or a pyramid, covered with a carefully distributed layer of success. As some examples: many of those flights I mentioned were to interview for jobs that I ultimately did not get. Also, my first job that wasn't temporary began just three years ago, which was five years after I finished my PhD, or eleven years after I graduated from Virginia Tech. That delay wasn't entirely for lack of trying.

I thought that jobs might be on your mind, and I thought I'd talk some more about them. But wait, you might be thinking, he's a computer scientist! What can he tell philosophy graduates about the difficulties of getting a job? Offers are supposed to rain down on him. Well, I've got this special skill. I can make a problem like "finding a job as a computer scientist" arbitrarily difficult. The skill is composed of several sub-skills: getting a PhD; changing my research focus during and after getting a PhD; wanting to travel; wanting to live specific places; and being unreasonably picky about where and how I spent my time.

Sometimes I wonder: in the abstract, what makes us want the most difficult things? [pause] That's a hard question, but I can tell you what it's like to want something, to spend years working on it, and then to reflect on having reached a goal.

I did an inventory recently of all the fellowships, internships, postdocs, industry jobs, government jobs, and professorships I applied to over the past decade. My records are sparse in a few places, but the number is somewhere between 300 and 350. About two thirds of those applications were passed over in silence, and I never heard back. The next largest quantity were those that were rejected, though sometimes it took a very long time. In fact, once I got a rejection email 430 days after the submission deadline had passed. I'm glad I wasn't waiting. One time I got a rejection email for a position I didn't apply for. It was for a faculty position in water resources management. I would have rejected me, too.

A tiny number of applications resulted in interviews. These spanned positions in academia, industry, and government, but regardless, the stakes were high. The interviews were the part of this process that I remember the most, and some interesting things happened. I'll list twelve of them for you, touching on each just briefly.

#1. There was that time I gave a job talk that was so well received that the applause was thunderous, and someone in the audience cheered; but I received no offer.

#2. There was that time I interviewed for a faculty position in a department where the faculty couldn't agree whether they had a PhD program. It was strange.

#3. There were several times when everyone I spoke with agreed that their workplace was in a great city to live in--affordable and vibrant--yet everyone I spoke with commuted in from the suburbs.

#4. There were all the times I was asked illegal questions during interviews, including the time someone told me he knew he wasn't supposed to but he decided to ask anyway. Those of you who go into management, remember to remind your employees not to do illegal things.

#5. There was that time during job talk Q&A at a research lab when someone angrily demanded: "name one thing your research is useful for besides helping people". I knew then that it wasn't the right place for me.

#6. There was the time someone held up a printed copy of one of my publications, pointed at it, and complained to me emphatically: "This isn't interesting!" I explained that I disagreed. He remained dissatisfied, though his institution did send me an offer, which for other reasons I rejected.

#7. There was that time at a university when I asked a room full of students what they liked about their department and their answer was several seconds of uncomfortable silence. Eventually one spoke up to say that if I joined the department it would be better.

#8. There was that time my flight to an interview aborted its landing twice and was diverted to a different airport, but meanwhile my seat mate and I had a great conversation. She was also on her way to interview for a faculty position (a different one), and we're both photographers. We still talk sometimes.

#9. There was that time, just after I finished my PhD, when I interviewed with a startup whose core product seemed a little too far-fetched. I had no other offers when they sent me one, and I reluctantly turned theirs down. Years later I looked them up and discovered that their website was a ghost town. Their core product had been relegated to Kickstarter, where its campaign had been cancelled, having reached just 2% of its funding goal.

#10. There was that time I interviewed for a faculty position and a professor told me the department's average class size was 60--that's six-zero--and they were aiming for even larger.

#11. There was that time an interviewer spoke so much that I didn't think I would be able to say anything, so I tried to cut in. He raised his volume to talk over me, and continued speaking louder for the next minute. The opportunity to say something never came.

#12. Finally, there was that time I checked out of my interview hotel while a woman stood nearby with two beautifully groomed ponies, in the lobby. It seemed like a good omen. Still no offer, though.

This was a mixed bag of experiences as they happened: some were pleasant, some I could have done without, and on some I still don't have a verdict. Regardless, I look back on them now as stories I can tell other people, and maybe they can find value in them. You might encounter some of those experiences when you interview, though probably not all of them. You can know that you're not alone, and your reactions of fear, anger, or amusement don't make you a strange person. You're following well-worn paths, although your footsteps are unique, and your experiences are yours alone.

That brings us to the part of the graduation speech where I'm supposed to offer advice. It's unlikely you'll remember any of it, but if I leave a positive impression, a gestalt of advice, I think I've accomplished my task.

My first piece of advice for your careers is to discover your limits, both to press at them and to take care of yourself. Being unreasonable is sometimes portrayed as a virtue, and there are rose-tinted stories about artists who don't compromise or leaders who demand perfection. In reality, it's a double-edged sword. Being unreasonable can drive you toward your goals, but you have to keep an eye on the toll it takes on yourself. Being unreasonable has helped me with key decisions, but sometimes I was close enough to the edge to be able to see the other side. Finding out how much you can handle or how long you're willing to persist is difficult, but the knowledge is valuable. When you discover your limits, you regret less, and in the long run you accomplish more.

My second piece of advice is to extract valuable things from failure. This is the kind of advice that I used to understand in theory but not in practice, so maybe save this one for later, and reconsider it from time to time. There are useful things you get from failure that you can't get from anything else: not from success, not from inaction. The baseline result is practical knowledge for the next try. Of greater value, failure is the raw material for the character trait we call grit, and for the discovery of one's creative voice. For example, I hear the value of my own failures sometimes when I write or speak. They steady my words, like ballast in a ship.

My third piece of advice is to develop friendships that sustain you. Professional networking is obligatory, but your well-being is obligatory too. You need people you can relate to and you can be honest with. College graduates sometimes lament that they no longer have the deep conversations that they did back in college, about themselves and how they relate to the world. I don't think people grow out of these conversations. Instead, the problem is making the right kinds of personal connections, and finding the time to cultivate them. The difficulty is real, but if you sometimes overcome it you will feel more at peace with yourself and more confident about how you relate to the world around you.

This brings me to the conclusion of what I planned to say. I tend to be brief on conclusions, and I'm aware that I'm on the critical path to lunch. For those of you exiting the academic world, this might be your last free food for awhile, so you should enjoy it. For those of you continuing onward in academia, I wish you good hunting in your quests for free food. Wherever you go, may your future department's events continue to be well-catered.

Jim, thanks again for inviting me to speak, and congrats again to all you graduates.