SEVENTY-SEVENTH ANNUAL

HONORS DAY

THE MOODY CENTER

SATURDAY, APRIL 5, 2025 - 2:00 P.M.

CONVOCATION ADDRESS BY PROF. PETER STONE

Thank you Interim President Davis for the kind introduction.

Dear College Scholars, Distinguished College Scholars, proud families, and friends:

It is my great pleasure and honor to be here, along with the President, Provost, and Deans of this great university, to celebrate your academic excellence over the past 3 or 4 years. Congratulations on your achievements!

[pause]

I am mainly here to offer words of encouragement and advice. But I will first say a few words about myself, so you'll know where I'm coming from.

To be honest, among the faculty at UT Austin, I don't think I'm all that special or unique. I've been lucky to be in the right place at the right time, and I've worked hard to implement the strategies that I will share with you today.

I found my research passion when I was about your age, and have followed it throughout my career. In my case, I've been fascinated by what I consider to be

one of the biggest open scientific questions of our time, namely “What is the nature of intelligence?”

While there are several different fields relevant to this question, I found my intellectual home in Computer Science, specifically Artificial Intelligence, where I was introduced to the challenge of programming computers to exhibit intelligence. When I arrived at UT Austin in 2002, AI was a small sub-discipline of Computer Science. I never would have imagined the transition to today’s world in which AI is pervasive across disciplines, and Universities are increasingly judged and ranked based on the strengths of their Computer Science and Machine Learning departments, or these days often colleges.

[pause]

I count myself lucky to have chosen to work in such an exciting area, and over the past 30 plus years, I have contributed in my own small way to the “AI moment” that we are all currently experiencing.

For example, with a team that included undergraduate honors students from UT Austin, I entered a car in the 2007 DARPA urban challenge that helped pave the way for the development and deployment of self-driving cars; I introduced the concept of reinforcement learning from human feedback, now known as RLHF, which has played an important role in the successful training of large language models such as ChatGPT; I created the first AI system to outperform the very best people at a real-time control task – namely high-speed car racing in the game Gran Turismo, a result that was featured on the cover of Nature in

2022; and I have been a leader in the international Robot Soccer Federation, RoboCup, in which our goal is to create a team of humanoid robots that can beat the best human soccer team, the world cup champions, by the year 2050. We're not close to doing that yet, but we've made a lot of progress, and when our team from UT Austin won one of the annual international competitions, the University lit the tower orange!

[pause]

Even so, like many of the faculty here, I expect that my biggest influence on the world will always be the accomplishments of my students. Many of my mentees have gone on to become professors, found companies, work at national labs or high-tech companies, or work on Wall Street. Others have found more unique paths - one of my former Ph.D. students is now a travel journalist. Regardless, my proudest moments are always when I learn from a former student that they think my class or research in my lab has played a positive role in their happy and productive life.

To that end, I've devoted a lot of energy to developing and teaching new courses and academic programs based on my belief that today, AI is a topic that everyone needs to know something about, alongside other essentials like math and writing. . Last fall I created a course called "The Essentials of AI for Life and Society" that was open to our entire undergraduate population, regardless of major, and has the goal of bringing AI literacy to everyone. If you weren't in the class, I invite you to check out the full set of materials on my webpage! I've helped create an affordable on-line Masters program in AI that dramatically extends the reach of our university's AI education. And most

recently, as Director of Texas Robotics, I helped design and launch our new undergraduate honors program in Robotics. This application cycle, we became one of the first universities to allow new applicants to the university to apply for a spot in a robotics program, and for the roughly 50 spots available, we received more than 3500 applications! I can't wait to meet the incoming class in August, and I hope that many of them will be sitting where you are now in 3 or 4 years time!

[pause]

But enough about me. The main reason I'm excited to be here is for the opportunity to share with you words of encouragement and advice. These sorts of things are definitely not "one size fits all." So you should of course decide for yourselves whether any of this fits your own unique situation. You may have even heard much of it before. But don't worry - I'm not going to tell you to make your bed every morning. I'm trying to make robots that can do that for you!

I'll begin with an observation of one way in which the world has changed over the past couple of centuries. It used to be that you were quite likely to do the same job as your parents and grandparents. In fact, peoples' last names were often their family's profession: Smith, Cooper, Fletcher, Ward, Webster – they all correspond to jobs. Then, around the time of the industrial revolution, that changed. You were more likely to do something different from your parents. But most people worked the same job for their whole careers. Until recently. Now it's quite likely that you will hold several very different jobs during your career.

What does that mean? It means that the skills and knowledge you've acquired so far, which may help you land your **first** job, are less important than your ability to acquire **new** skills and knowledge. You will need to be a lifelong learner. You should aspire to become an old dog who can learn new tricks! Despite what some people are saying these days, that is the most central role of universities. We aren't here to tell people *what* to think. We're here to teach you *how* to think - how to learn. I trust that that has been your experience here. I believe that it's one of the most important, essential roles in today's society!

[pause]

One way I've found to learn how to learn, is by teaching. Regardless of whether or not you're a teacher by profession, a great way to master a new skill is to learn it yourself well enough to teach it to someone else. This was first impressed upon me by my 10^{th} grade Chemistry teacher, the late Dr. Peter Demmin. He assigned us lots of chemistry problems to solve, but told us to only do them until we thought we understood the concept. Then we were to switch to teaching our classmates who were still figuring it out. I mastered high school chemistry in that class because I spent more time teaching than doing.

And since I mentioned Dr. Demmin, who was an inspiration to me, another way to become a lifelong learner is to be both a mentor and a mentee. Choose your mentors carefully, as people whom you admire and aspire to emulate. And be generous as a mentor to other people, again learning by teaching.

On a related note, many of you will have an opportunity at some point to become leaders, if you haven't already. For that purpose, I advise you to hone your emotional intelligence. This may be strange to hear coming from a computer scientist. There was a time when the joke about my field was that you could identify an *extroverted* computer scientist by noticing that when talking to you they were staring at *your* feet. But that's no longer the case. Even if you're a computer scientist like me, I urge you to become a student of people. Be quick to observe and slow to judge. Try to understand where other people are coming from, even if you disagree with them. There's usually a reason for their opinion. And then pick your battles. Sometimes it's important to try to change peoples' minds. But sometimes it's better to recognize that their opinion won't change – and that it may be better to try to reach a compromise. Understanding people, and their values and priorities, will help you no matter what your job is - especially in today's particularly chaotic world.

[pause]

So far I've advised you to be a lifelong learner and to hone your emotional intelligence. Switching gears, I encourage you to make time to care for your body and mind. Even when you're busy and stressed, never compromise on getting enough exercise, enough sleep, time for family, and time for spirituality, whatever that means to you. Take the time to value and nurture your relationships – both your professional network and your personal friendships.

My favorite strategy is to plan time for all of those things. I plan my fun and relaxation and then work in all of my "free" time.

It's easiest to do that if you love your job – I'm very fortunate in that way. But that's something you should also strive for. After all, you are likely to spend a large percentage of your waking time over the next 40 years or so at work. So that's something worth trying to optimize!

[pause]

Finally, manage your expectations. Believe in yourself and maintain a growth mindset. But also embrace failure. You won't succeed at everything you do, and that's completely to be expected. I've had my share of job applications, paper submissions, and funding proposals rejected. But rejections are good learning opportunities, and often pave the way for later successes.

Keep in mind that behind every success there's a good measure of luck. As I acknowledged near the start, a lot of my success has come from being in the right place at the right time. I was lucky to become interested in robot soccer at the very moment that it started becoming imaginable. And I've been lucky to be working in a field that has risen to such heights. You should always aim high. But try to stay humble when you succeed, and don't get too discouraged when you fail. I recommend focusing as much of your attention as you can on what **you** can control. You can't control luck. But as they say, luck favors the prepared!

[pause]

OK. I've recommended that you always continue learning, hone your emotional intelligence, take care of your body and mind, and manage your expectations. I hope that some of this advice has resonated with you and will be useful to you as you plan your future.

But today, we're here to celebrate what you have already accomplished - your academic achievement as a College Scholar or Distinguished College Scholar at The University of Texas at Austin. That's a distinction that you will have for the rest of your life..

So bear it proudly and represent us well. Congratulations again!