

## **Nigel Roberts – Honorary Degree Acceptance Speech**

I'm most grateful to the Orator for those kind words. And incredibly honoured to receive this degree of Doctor of the University of Essex. I'm very glad that we are able to be together today to celebrate your achievements and look forward to your future successes.

Before I begin my Response, I just want to put on record my gratitude to the faculty of my time here at the University of Essex, including Iain MacCallum, Dave Lyons, the late Professor Tony Brooker and Mike (Sir Michael as he now is) Brady. Each of whom inspired me, each in their own special way. I also want to highlight and thank the University's technical staff; without whom -- just like the Hogwarts house-elves -- the work of this University, and today's celebrations wouldn't be possible. I'm particularly grateful because my own mother, almost 88, who can no longer travel, is able to watch today's live stream from the Royal Connaught Residential Home in the Channel Islands where she now lives.

Fellow graduates of the University of Essex. I have a short few minutes during which to inspire you; and present you with a metaphorical adventurer's bag for you to take with you.

To drop several useful things for you to pick up and put in your inventory as you go forth to explore the rest of this world; to share an idea (or two) that may assist and guide you on the Hero's Journey upon which you are all now embarked.

And, maybe, give you a couple of hints as you start to navigate the maze of twisty little passages the entrance of which now lies before you. Are you sitting comfortably? Then I'll begin. Once upon a time . . .

Several decades ago, I was right here, in your shoes, at a graduation ceremony much like this one, here at Wivenhoe Park, in the summertime, on a glorious day much like today, to receive my degree in Computer Science.

I hadn't achieved the result I know I should have done. The consequence, probably, of too much time spent playing -- and writing -- computer games. And I have no doubt that there are a number of you who may be feeling similarly about your own result.

Stop. Just don't. Here's a big secret: It isn't going to matter quite as much as you might have been led to think it does.

Whether you got a First, a 2:2 or something else, the time you spent here at the University of Essex, the experiences you gained, and the lessons you learned, both academically and in life, were, and will continue to be far more precious, far more useful to you in your forthcoming quest than you yet realise. This place, our University, has, already, shaped you, in ways you will only fully appreciate as your own journey unfolds. And will continue to do so throughout the rest of your life.

By your leave, I should like to offer you some directions.

Learn what 'impostor syndrome' is. And resist it with all your heart. On this journey, you will encounter plenty of folk who will want to diminish you-- don't do it for them.

Know that simple ideas are often the most powerful.

Understand that not reaching something you aimed at, perhaps something you desperately wanted, is the world's way of telling you something...

Maybe you ought to have put in a bit more effort. Perhaps there's a better way of getting to where you need to be. Perhaps you were after the wrong thing all along. Or perhaps it just wasn't meant to be. None of these is a failure. Whatever turns out to be the case, the most important thing is that you have succeeded; in obtaining information; on which to inform future actions. We engineers call this 'feedback'.

To non-technical folk, 'positive feedback' has come to be synonymous with 'praise; 'negative feedback': with criticism. But engineers know that metaphor isn't that

accurate. Negative feedback is useful. It is the principle behind things like seat belts and shock absorbers. Positive feedback can be dangerous. Who has seen the film of the Tacoma Narrows Bridge disaster? (It's on YouTube!) That's positive feedback, resonance, in action. You must take account of feedback, nonetheless.

I once worked, part-time, at Ipswich Airport as a flight information service officer. There's one very important lesson I learned from the aviation world. You need to pay attention to and learn from the mistakes made by other people: You won't have the time to make them all yourself and more than a few of them are fatal.

Emulate a more well-known Doctor, the one from Gallifrey, and learn to appreciate the four-dimensional nature of life. In particular, understand the 'time value of money'. A basic knowledge of that concept at this time in your life will guarantee your material comfort in the future. Knowing small differences in the rate of return make big differences to outcomes over the long run. That's just maths. But learn how to use it to your advantage. You have the time.

I was a very small child in the 1960s. It was a time of regeneration, rebuilding, and great optimism. This University of Essex itself stands tall. Both a symbol and as a physical reminder of that age of optimism. Tolkien wrote of Two Towers. We have six. This, our University, was created in the fire of "the white heat of technology" – an expression coined by the then Prime Minister, Sir Harold Wilson; who was, in 1967, himself the very first recipient of this degree of Doctor of the University of Essex.

And, if you look over the last few years, we can see just how that fire has continued to burn, hotter, and brighter, than anyone could have imagined. Technological innovation bringing humanity benefits unimaginable as little as ten years ago. But carrying new dangers, challenges and risks unforeseen.

It was not "Big Brother" - the government - as George Orwell predicted, that would come to know our every movement, watching and listening to us in our homes through the telescreens. It was an overgrown bookshop.

As I started to put these words together, over two years ago now, I wrote: "I am beginning to worry that our Europe is starting to edge ever closer to armed conflict than at any time since Soviet forces withdrew from the eastern part of Germany in 1990; unexpectedly abrupt political and social changes upsetting the applecart the world over." Earlier this year, my fears became reality. And, for two and a half years we've lived through the COVID pandemic, that has taken many lives, and prevented celebrations such as this.

Tolkien, although he cordially denied there was any allegorical character in his writing, was shaped by the events of the First World War just as much as Wilfried Owen and Siegfried Sassoon; his work cannot help but reflect that. Writing three-quarters of a century ago, he could have been referring to today:

"I wish it need not have happened in my time," said Frodo. "So do I," said Gandalf, "and so do all who live to see such times. But that is not for them to decide. All we have to decide is what to do with the time that is given us."

You, you all, now have the challenge before you. Become the eternal champion or refuse the call. Whether to engage with the issues that will confront our society in the years to come. You will face questions, regarded as science fiction just a short time ago: such as the ethical and legal dilemmas resulting from the increasing use of AI, in daily life. Are Dr Asimov's three laws to be relegated to nothing more than a quaint literary footnote; in a coming age of self-aware deadly weapons who will decide for themselves whom to kill but have no capacity for debating existential philosophy with a Lt. Doolittle of today?

From its earliest days, this, our University always had an unapologetically activist tradition. So, for some of you, I know there's little need for me to encourage you in that direction. But for those of you who haven't yet thought that much about it, remember, it's going to be your world – you need to take the necessary action to make sure it's a world you want to live in.

As Terry Pratchett, Theodore Roosevelt, and just about every flying instructor teaching a student pilot what to do when faced with total engine failure all said: “The worst thing you can do is nothing”.

Heed the words of Glinda the Good Witch: you have and will always have the power – you just have to learn that for yourself. Time will pass, and much sooner than you expect, you will be old enough to start reading fairy tales again.

And that, my friends, is pretty much it, for today. As we take our leave of each other, allow me to hope and wish for each of you, that you go on to achieve the most remarkable successes and I will leave you with the wise words of yet another well-known Doctor, that “student-of-all-the-sciences” . Dr Emmett Brown

"Your future hasn't been written yet. No-one's has. Your future is whatever you make it. So make it a good one."