

Associate Professor Robotics

Dr Michael Milford



What does an Associate Professor of Robotics do?

We work on developing new technologies that enable robots to be truly intelligent and to be able to see and understand the world as well as we humans do.

What do you work in and what is your specialty?

My area of expertise is in developing intelligent perception and navigation technologies for robotics. We do this in a unique way, by modelling how we think animals and humans navigate and perceive the world and what is happening in our brains when we do so.

How did you become interested in this area and when did you first start?

I became really interested in the concept of intelligence in early university and that led me onto robotics and neuroscience as a career.

What study path have you taken to get here?

I did a Mechanical and Space engineering bachelors degree and then a PhD in robotics.

What do you like most about your job?

I love that I get a chance to try and discover new things about intelligence and to leverage that understanding into new technologies that make robots ever smarter, while also potentially revealing new insights into how our own brains work.

Do you have any particular career highlights?

Not so much a discrete event, but more a realization over the past few years that our (and others) persistent drive to bridge the divide between robotics and neuroscience has started to pay off in terms of changing what people are doing and how they are thinking on a global basis.

I'm also proud of my work over the past 15 years in developing innovative approaches to STEM education. Most recently I'm really excited about our Math Thrills initiative, which is combining mass market entertainment like young adult novels with mathematics education to engage and excite students. We're currently releasing our second generation Math Thrills package to schools, which includes exciting action-packed workshops where students get to live out exciting fictional scenarios filled with maths – for more go to www.MathThrills.com

YouTube: <https://www.youtube.com/watch?v=c5gn7zYWPl>

What advice would you give to someone interested in working in this area?

I think that one of the keys to enabling yourself to do what you really want to do is to combine doing things that you are passionate about with doing things that you are good at. I think that people often get stuck in one extreme or the other, where a balance between exploiting strengths and pursuing passions is optimal.

