PhD Candidate
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What does a PhD Candidate do?

A PhD Candidate is a student who is undertaking a Doctor of Philosophy degree (a PhD). PhD Candidates work on solving a specific research problem over the course of their degree, to publish their findings and contribute knowledge to the world.

What do you work in and what is your specialty?

I am a PhD Candidate in the Australian Centre for Robotic Vision (ACRV). Within this centre, I am a part of the Vision and Action 1 (VA1) theme. This theme is focussed on the problem of 'faster than human pick and place in unstructured environments'. Under VA1, I am focussed on investigating ways that we can represent pick and place tasks, like picking objects out of a shelf, such that robots can learn how to pick and place objects just like humans do.

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

Out of high school, I chose to undertake a Bachelor of Mechatronics Engineering at the Queensland University of Technology. Within the Mechatronics Engineering degree at QUT, I took a few subjects where we were tasked with building robots from scratch. One of the robots we built was a soccer playing robot that was completely controlled by a smartphone. Building this robot was (as I'm sure you can imagine) heaps of fun. It wasn't long after doing this project that I heard about the ACRV and considered undertaking a PhD in robotics.

What study path have you taken to get here?

As before, I went straight from high school to a Bachelor of Engineering at QUT. During my final year of the four year degree, I started applying for (what some may regard as 'traditional') Engineering jobs. Having undertaken a Mechatronics degree, I was able to apply for jobs looking for Mechanical, Electrical or Mechatronics Engineers. Having undertaken a number of computer programming subjects, I also applied for a job at a Software Engineering company. I was successful in obtaining a job as an Electrical Engineer in the Building Services team of a very large Engineering consultancy company. After three months of full time work, I decided to leave the company and instead start a PhD in robotics.

What do you like most about your job?

The thing I like most about my job is that I don't get that feeling of 'ughhh work' when I wake up each morning. A feeling I'm sure we all know too well from working jobs we don't love.

Do you have any particular career highlights?

If we include my undergraduate degree as part of my career, there were a great many highlights. One in particular was undertaking a semester abroad at the Technical University of Denmark.

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

For anyone wanting to work in robotics, there are countless ways to get involved. The robotics industry is growing rapidly all across the globe and there will be more and more jobs in robotics as the years go on. One way to get involved is to follow what I've done: go to university, get good grades and start a PhD. Another way might be to skip the PhD and look for a robotics job straight after a Bachelor degree. There are also a number of free online

courses where you can learn everything you need to get started in robotics. The only issue with only taking these online courses is that many companies may not consider your application if you do not hold a formal qualification. This is beginning to change though with some online courses offering qualifications. A third potential option is to start your own robotics company. As before, these are by no means the only pathways to getting a job in robotics.