

Kyll Schomberg – Class of 2005

Interview questions

1. What are you doing now?

I am currently in my final year of a Ph.D. (Doctor of Philosophy) within the school of mechanical and manufacturing engineering at UNSW Australia. My research is focused on optimising the thrust chamber design in liquid rocket propulsion systems (which is just a fancy way of saying that I get to build and test mini rocket engines!) I also teach in a number of engineering courses at UNSW Australia (lots of fun) and sit on the faculty of engineering board (slightly less fun).

Work/life balance - Aside from my research I have a number of academic positions (undergraduate thesis supervisor, lead tutor, lab demonstrator, class demonstrator) in a number of courses within the school of mechanical and manufacturing engineering at UNSW Australia (engineering, mechanics, fluid mechanics, thermodynamics, advanced thermofluids, engineering management, computational fluid dynamics – which range from 1st year to postgraduate level). I am also currently on the faculty of engineering board, higher degree committee and the school of mechanical and manufacturing engineering board.

Travel (since school) – Completed a university exchange to Boulder, Colorado in 2009, Worked as a lifeguard/wakeboard instructor/paintball instructor at the River Way Ranch Summer Camp in Sanger, California in 2012, Invited to present my research on liquid rocket propulsion at the 50th AIAA joint propulsion conference (Cleveland, Ohio, 2014), 6th European Conference for Aeronautics and Space Sciences (Krakow, Poland, 2015) & 51st AIAA Joint Propulsion Conference (Orlando, Florida, 2015)

2. How did you get there?

In a nutshell, by not being afraid to try new things and taking opportunities when they arose.

Like most all-knowing high school students, I had no idea what I wanted to do after finishing school. All I just knew that I didn't want to go to university (which is somewhat ironic now after 8 years and counting...) Although, working a number of different (see: boring) jobs after school made me think that maybe learning more about something I was interested in might not be so bad after all. Given that this was such a well-structured plan, I made a last-minute change in my preferences and somehow ended up living down at UNSW Australia doing aerospace engineering. Like most undergraduate students, I managed to keep myself adequately distracted from classes by living in a university college, working with the student union and going on an international exchange. It wasn't until my honours year that I discovered research, and realised that I could actually get paid to learn about and do something that I really liked. After graduating I began my Ph.D. in propulsion and have been here ever since (but not before a brief stint as a wakeboarding and paintball instructor at an American summer camp).

3. Who was your inspiration?

Not sure I've ever had one specific source of inspiration, although trying a number of different jobs definitely motivated me to find a career where I could do something I loved (as opposed to just counting down the days until the weekend). In terms of inspiration itself, I think this has come primarily from the (many) mistakes I have made along the way, and the desire to see them not repeated. I have also been fortunate to get some great advice (and learn to filter out some questionable advice) along the way from friends, family and even, believe it or not, my school teachers!

4. What are your memories of school?

Almost all of my school memories come from outside the classroom (sorry teachers), and primarily include the random things I just happened to put my hand up for. Things like going to peer support camp at the last minute, volunteering to go to SRC meetings at other schools and joining a school sports team even though I didn't know what the sport was (turns out water polo is pretty demanding) are all memories I could easily have missed out on.

At school - Caltex all-rounder, SRC representative for 4 years & executive SRC member for 1 year, sports captain for 1 year (Yarrah from memory – the green one), HSC merit list – mathematics, represented the school in a number of sports (soccer, volleyball, athletics, hockey, waterpolo)

Outside school (during the time I was at school – I think that's what it meant) – Surf lifesaving volunteer (4 years), competed at state and national surf lifesaving (medallist at state level), Competed in all schools national volleyball tournament in Melbourne (2 years, captain for 1 year)

5. Knowing what you know now, what would say to your 15 year old self?

Well, remembering my attention span at the time I'd probably have to narrow it down to:

- It's ok to make mistakes (everyone does it and you'll do it a lot), as long as you learn from them.
- Make sure you take care of yourself and your mates, if you get a gut feeling that something is wrong – then something is almost certainly wrong.
- Try as many different things as you can (and while you're there, you may as well give it a decent go).

6. In your opinion, what makes a successful person?

For me, success is measured in quality of life (although I certainly believe that each person needs to decide for themselves). I've found that the happier you are with what you're doing, the less money/resources/other things you need to stay happy. Obviously, you can't eat or sleep under happiness, so