



# WHY IT MATTERS...

## AERONAUTICAL & AUTOMOTIVE ENGINEERING



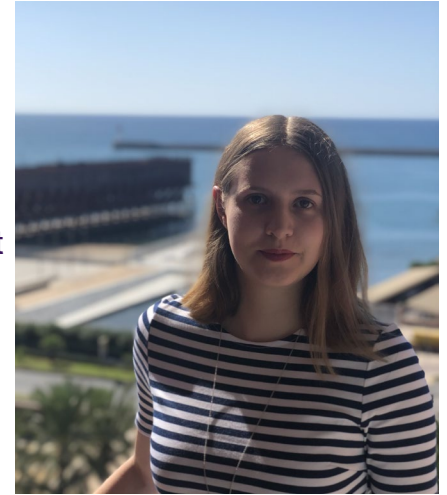
Loughborough  
University

### Agate Utane

#### Research Student

Automotive Engineering matters to anyone who has anything to do with vehicles. While my research area is very narrow and only covers tyre testing and modelling, I feel like I can provide a valuable contribution to the automotive industry, as the paramount aims of my research are to reduce time and costs spent in tyre testing and modelling.

If any of the resources are saved due to improved tyre testing and modelling procedures, it means that the vehicle manufacturer can invest this time and money in other aspects of the production of a new vehicle, or even reduce the time to market.



#### Higher Education:

BEng Automotive Engineering with Motorsport at University of Hertfordshire, UK

MSc Engineering Project Management at Lancaster University, UK

PhD – now studying in Automotive Engineering at Loughborough University, UK

#### Why did you choose Automotive Engineering?

I find Automotive Engineering a very exciting and useful subject to study. In engineering, you can finally see the real-world applications of mathematics and physics that you learnt at school (in a bit more advanced state, of course!).

A degree in engineering provides very attractive job prospects, e.g. you can work in F1 racing teams, design airplanes, trains, ships, space shuttles, work on skyscrapers etc. You can design and build anything you want!

Regardless of which engineering discipline you studied, the basic principles remain the same, it is the application that changes – either you are in the air, on the ground, or under water!

**Agate's Advice:** Go ahead and study a subject that you are really interested in. The biggest mistake you can make now is to choose a subject that your parents want you to study even though you do not like it yourself. Your life is yours to live, and it is only your decision to make! If you feel like the university life is not for you, that is completely fine. There are numerous alternatives after finishing school!



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### Agate's experience as a student

I had always wanted to go to university, so it was a huge step in my life to start my Bachelor's degree. I was excited to study only those subjects that are related to engineering (note: in Latvian schools we study all GCSE subjects regardless of what we are planning to do after graduating). I found it appealing that universities in the UK offer a range of extracurricular activities – different sports, music, theatre societies as well as interest clubs for those who are into computer games or Harry Potter etc.

In all the universities where I have studied, there are always events and things to do that are free of charge. For example, in the University of Hertfordshire I attended free pilates and yoga classes organised by Active Students, at Lancaster University I learnt the basics of computer coding (HTML, CSS, Java) organised by Code First: Girls. Now at Loughborough University, I am part of the Pole Fitness society (this one is not free of charge, but it is much cheaper than professional studios).

After all, university is not just about studying and a mountain of exams; whatever university you decide to attend, there are always going to be a range of opportunities to develop yourself outside of the field you have chosen to study, and for me that sounds very exciting!

### Agate's Career

Back at school I dreamt of starting my own business – a chocolate factory! I used to love chocolate (and I still do!) and felt very comfortable being the lead in group projects so leading my own company sounded quite tempting. That was until I came across an advertisement in a magazine for a Bachelor's degree in Automotive Engineering in a University in Latvia. I realised that besides chocolate, I also really liked cars and was quite good at STEM subjects. That was when I decided to study Automotive Engineering instead of going into the chocolate business.

I started my journey at the University of Hertfordshire, a suggestion from someone from a racing team in Latvia. I gained my BEng in Automotive Engineering with Motorsport. Then took a year out and worked full-time to save enough money for my Master's at Lancaster University; I got my MSc in Engineering Project Management. As I'd already spent 3 years studying pure engineering, I thought it would be good to expand my horizon and get a qualification in Project Management while keeping a link to engineering. Now I am a PhD student in Automotive Engineering studies at Loughborough University!

Loughborough University offer: Aeronautical Engineering MEng and BEng degrees

Loughborough University offer: Automotive Engineering MEng and BEng degrees