

# IDEA League Summer School 2020 – Online Course

## Chalmers University Summer School

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Program period	2019/09/25 to 2023/09/25		
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### Report contents

#### ① The reason you joined the program

I am enrolling a Doctoral Degree for Supply Chain Logistics and Management as my research topic. I have an eagerness in developing a new insight in engineering field as well as expanding my future career and capabilities essential to the novelty theories about these areas. At least, there are four considerations of mine to choose this summer school course program and campuses as well. First and foremost, analysis and modelling road user behaviour course are linear with one of research theme in our laboratory. I believe that the proposed program could help me to enlarge my insight from other perspective on my current research topics. Moreover, I also believe that the program have implication to develop and simulate the supply chain logistics and management better. Secondly, it can help me to create my memorable international experience and I hope that through this event offer me a unique means of gaining professional experience and discovering new opportunities too. Thirdly, I want to expand my friend and networking with other professional from another fields too. Apple's Steve Jobs has often repeated that "innovation distinguishes between a leader and a follower." In order to become a leader, it is very important to learn from the leaders, and this international summer schools can help me to learn from top academics and professionals who are typically busy and often inaccessible during the academic year. The last, it can gain the new knowledge and transferable credit. Speaking frankly, the topic of this summer school is quite new for me and even I don't have any knowledge about it too. With this program, I believe that it can help to brush up on the subject I'm not confident about.

#### ② Pre-program preparations

I collected some information regarding the event before main event was held by virtual meeting software, like Zoom. Speaking frankly, I more like to visit the campus, because I would able to

really feel the experience to connect with new friend from around the globe and feel the experience of different study-cultured in the Chalmers campus. Furthermore, the organizing committee was reliable and helpfully to provide some information regarding the program.

**③ Program contents, activities**

The program was conducted by Zoom within five days courses and trainings respectively. The courses was provided by professors in Chalmers University and professionals, while the training was running with matlab simulation teaching by associate professors in Chalmers University. he aim is to enhance knowledge on the topic, this course embraces a multidisciplinary approach to provide the theoretical foundations and the experimental methodologies to analyze and modelling road-user behavior. The outcomes from this courses and training was as followed: explain the importance of analyzing and modelling road-user behavior, for improving road safety; illustrate different types of human factors theoretical driver models; compute relevant quantitative and qualitative metrics, to analyze and model road-user behavior; identify the challenges in the analysis of real-traffic data from naturalistic studies; compare the models of road user behaviour and their applications; illustrate the currently available tools for the virtual evaluation of active safety systems.

**④ Program participants**

The online summer school was attended by 31 participants, which were 12 Master's students and 19 PhD students. Moreover, the participants was coming from different campuses, such as 11 RWTH Aachen, 7 TU Delft, 3 Politecnico di Milano, 2 Chalmers, 2 ETH Zürich, 1 Tokyo Institute of Technology, 1 Tsinghua University, 1 University of Florence, 1 Stellenbosch University, 1 Tsukuba University, 1 University of Queensland

**⑤ Any difficulties you faced during the online program**

During the event, I always faced unstable network hence it made me disconnected whole the time. Besides that, my laptop was running slowly during the course with matlab simulation due to so many programs were operated, such as Zoom, Matlab, Adobe, and Ms. Word. It resulted my laptop was damaged. Hence, I decided to not follow 2 days the event until the end.

**⑥ Outcomes of your participation in the program**

In my view point, the event was successfully to give and highlight the issues of road users behaviour into some lectures and collaborative discussion among the participants. I can say that there are three benefits from this online summer school programs, event it was only three days. Firstly, the lectures explained about the fundamental aspect of theoretical framework for modelling driver behavior, and bring in to collaborative simulation model, such as quantitative analysis of driving simulator data, sensors for active safety systems, and assessment of safety benefits associated to the introduction of active safety systems. Furthermore, we were grouping into some groups in order to get the knowledge more comprehensively. Collaboration thoughts and experiences from different perspective of participant were giving the efficiency way to learning and thinking about the current situation of the road user behaviour concept. Lastly, I think that it is very important to learn from the leaders, and this international summer schools helped me to learn from top academics and professionals who are typically busy and often inaccessible during the academic year.

**⑦ Any advice for students who wish to participate in a similar type of online program**

To those who are familiar with this program theme, this program was recommended due to its experience with presenting the credible speakers toward their experience and expertise of this theme. And to those are unfamiliar with this program theme, you should give extra effort to do

some mini-research observation as brief information. Ultimately, this event was totally suggestion either to the familiar and unfamiliar ones because it will help you to learn about urban mobility concept from top academics and professionals who are typically busy and often inaccessible during the academic year.