



Travel report WP2 trip to Barcelona 18.-25.5.2022

This trip was related to the Race4Scale project work package (WP) number 2. The content of WP2 is defined in the project plan as a trip to a European destination and three separate studies on the delivery of the trip.

- WP2 Benchmarking of the automotive and motorsport ecosystem in the European context.
- WP2 Benchmark study in the EU context.

Xamk's project staff took part in this trip: Mikhail Nemilentsev, Jan Kettula, Jarmo Kujanpää. Xamk will conduct related research on the collaboration of educational institutions with the ecosystems of motorsport and the automotive industry. It will be completed in the fall of 2022. Eduko will make a similar trip to Sweden on July 4-9, 2022, with the topic of the automotive industry and motorsports, and two studies on these topics.

The following describes the program and key findings of the Barcelona WP2 trip in chronological order from 18 to 25 May 2022.

18.5. Wednesday.

Arrival in Barcelona at 20:00. Accommodation in a hotel.

19.5. Thursday.

Universitat Politècnica de Catalunya Barcelonatech / The School of Industrial, Aeronautical and Audiovisual Engineering of Terrassa, where student projects **MotoSpirit** and **UPC ecoRacing** are in program.

[MotoSpirit — Escola Superior d'Enginyeries Industrial, Aeroespacial i Audiovisual de Terrassa. ESEIAAT — UPC. Universitat Politècnica de Catalunya](#)

[UPC ecoRacing — Escola Superior d'Enginyeries Industrial, Aeroespacial i Audiovisual de Terrassa. ESEIAAT — UPC. Universitat Politècnica de Catalunya](#)





Our host was Professor Xavier Gamez-Montero. https://eseiaat.upc.edu/en?set_language=en

Mr. Gamez has supervised a number of bachelor and master thesis related to CFD simulations with OpenFOAM in cars F1 and motorbikes aerodynamics.

His personal interests are in active learning; flipped classroom, blended, and active engagement in reading primary literature in class, etc.

He expressed his interest in the concepts of “simulation-based learning” and especially especially the FuturesLab education concept.

After Mr. Gamez’s presentation Mikhail and Jan gave an overview on the concept behind Race4Scale project, work and results until today concentrating in FuturesLab and InnoCamp sub projects and shortly referred to future R4S-project tasks.

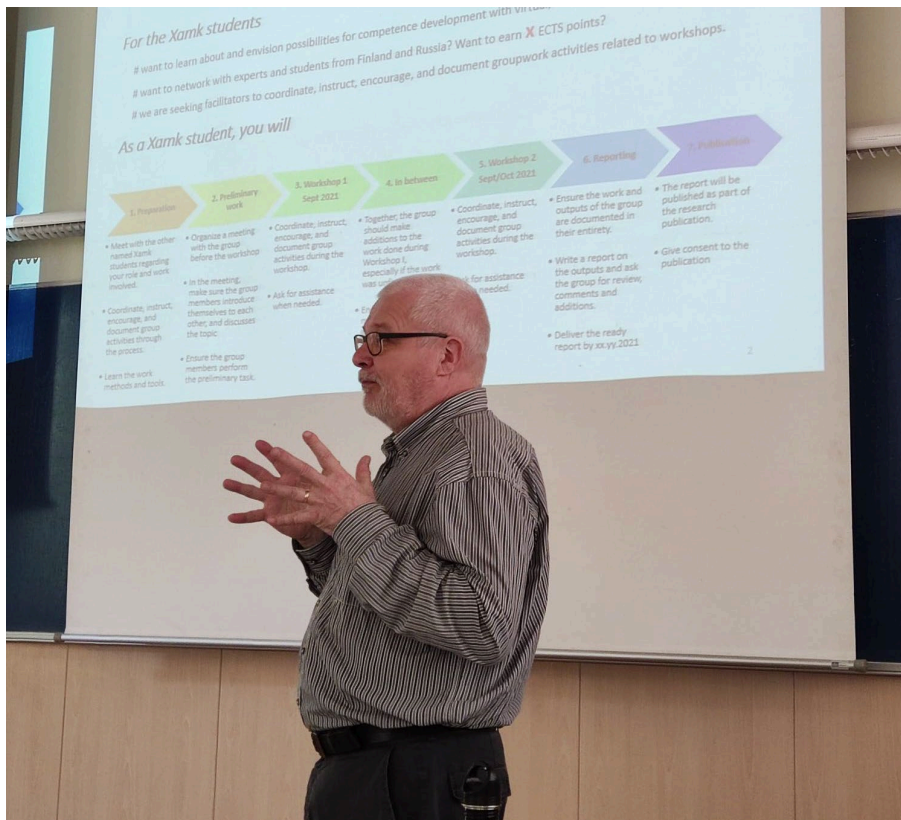
After the presentations we discussed about potential topics for common activities in the future e.g. cross-disciplinary educational cooperation around a superb lunch table provided by Mr. Gamez in the school canteen.



In front of the Terrassa campus main building. From left to right:
Jarmo Kujanpää, Mikhail Nemilentsev, Xavier Gamez-Montero, Jan Kettula.



Welcome stand in the main building entrance hall.



Jan Kettula's presentation of the Futures Lab by Xamk.



In the classroom after the R4S project presentations.

20.5. Friday

Participation in the Emerging Markets Forum - The world in 2060 seminar invited by Casa Seat (part of VAG Group).



Information about the Forum, where Xamk representatives were invited.



Due to corona restrictions the initially planned SEATcar and component factory and visitor center excursions could not take place.

However we were invited to participate a very interesting and informative seminar organized by CasaSEAT; the "Emerging Markets Forum: The world in 2060". The key-note speaker was Mr. Harinder Kohli, Director and Chief Executive of Emerging Markets Forum and Director, President and CEO of Centennial Group International as well as Founding Editor of Global Journal of Emerging markets Economies.

His presentation dealt with opportunities and risks for global markets with a time span reaching to year 2060. He envisioned ten (10) major megatrends mankind will meet in years to come. According to his interpretation most of these megatrends also have strong influence in oneanother. Hence he did not prioritize any of these megatrends.After the presentations we heard a very interesting and intensive discussions btw the speaker and members of the audience.

After the presentations R4S members had a short discussion with the chairman of the seminar. He expressed his interest in R4S's results and we agreed to provide CasaSEAT for more detailed info about the project.



Key-note speaker Mr. Harinder Kohli on the left interviewed after his presentation.



21.5. Saturday and 22.5. Sunday

Getting to know the F1 race at the Motorsport Center in Catalonia. On Saturday the event program included F1 time trials as well as women's Formula W World Championship race in which Emma Kimiläinen finished fourth.



View from outside of the F1 event auditorium.



Seats of Xamk's representatives on the very left. People in red on the left are Ferrari supporters. People in orange on the far right are Dutch supporters of Max Verstappen (RedBull).



Observing a somewhat different scale of racing facility.

23.5. Monday

An excursion to car factory was planned for this day. However, this was cancelled because the SEAT car plant in Barcelona was temporarily closed. These were the same reasons as with the closures of other car factories in globally, due to lockdown and shortage of some major components. This day was the only holiday of the week and was taken advantage of to explore the sights of Barcelona's central area.



FC Club Barcelona, Camp Nou Stadium. Barça's fan store on three floors.



24.5. Tuesday

Monlau: Motorsport Technical School in Barcelona. Our host was Carlos Lopez, Director de Estudios
<https://www.monlau.com/?lang=en>

Monlau Technical School is a private school whose main sponsor is the multinational oil company Motul, which also is included in the name of the school. The school also has numerous other well-known partners including Honda Alpinestars, Konica Minolta, Cupra Racing, etc.

Monlau Motul offers a three year curriculum to obtain a BA level degree in automotive and motorbike mechanics. The school trains mechanics who work with rally cars, formula-cars and racing motorcycles. Non-technology oriented topics include only IT, English language and enterprise courses. The school's students are mainly from Spain but also from Portugal and Latin America. The annual tuition fee is 6,000 euros. The students work in racing teams throughout their studies. The racing teams are involved in well-known motorsport events such as the Paris-Dakar Rally, the WRC Rally, the Moto-GP and various formula series Europe wide.

Compared to own experiences about similar educational institutions, it was amazing to see the students' activity in studying, the strength of teamwork and their pride in their own educational institution. Seeing the school's performance, it's easy to believe the director's estimate that they are perhaps the best and best-known school in Europe for training motor sports mechanics.



Monlau-Motul Technical School's welcome stand in the entrance hall.



Technical school students who were testing racing motorcycles. In the middle of the picture in blue shirt our host Carlos Lopez.



Students in a classroom during a theory lesson.



Testing-aula * where rally and formula cars are being built and tested. Notice the uniforms of the students as well as the intensive and motivated teamwork.

*) "aula" in English = classroom, "aula" in Finnish = a hall, a large space in a building (c;

25.5. Wednesday

Departure at the hotel towards Finland at 7:00 am.