

# International Project – Field Trip to Latvia 2017

Department Management, Information, Technology

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## Journey to Rezekne/Latvia, Sunday, November 12<sup>th</sup> 2017

Pascal Fritsch

At 5 o'clock, all students and Mr. Beckmann met at the airport. After that, everyone checked in and boarded to the plane slowly. At 10 o'clock local time we landed in Vilnius, the capital of Lithuania.



Illustration 1: Arrival in Vilnius in front of the airport

Then we had to go by bus to our real destination, Rezekne. After a 4-hour drive with little breaks we arrived in Rezekne and checked in at the hotel as well as the rooms. Some students, tired from the trip took a rest in their rooms and some others went out exploring the city. In the early evening we all went to the restaurant Marijas Kafija for a very delicious dinner. Later we played a few rounds billiard and talked about the upcoming week at the University of Rezekne. Then we went back to the hotel and most of them went to their room.



Illustration 2: By bus to Rezekne/Latvia



Illustration 3: Hotel "Kolonna" in Rezekne

## First Project Day, Monday, November 13<sup>th</sup>

Paul Baucus

It was the first day after our arrival in Rezekne. We all were pretty motivated, so we got up on time and met at around 8 o'clock at the breakfast buffet in our hotel.

As the Rezekne Technology Academy (RTA) is in walking distance we started early enough our approximately 20-minutes foot walk.



Illustration 4: Breakfast at Kolonna Hotel in Rezekne

The building for the engineering sciences is new and looks very modern. It was built 2 years ago and cost around 6 million euros, financed partly by the European Union. After our arrival we were welcomed cordially by Prof. Dr. Andris Martinovs he was our contact person at RTA. He showed us the laboratory we would work in for the week and there we also met the Latvian student colleagues. All the different projects were shown to us and explained briefly. During the next step we were separated in mixed groups Latvian/German and then we started our work.

We tried to program the first tasks that were given to us. Some groups had to solve before some substantial problems they had with their hardware equipment. For example, one group needed to fix their hydraulic system of the setup first. This group had the most difficult setup in my opinion because it wasn't just a software issue, they also needed to connect wires to solve the hardware problems. A very complex but modular automation system was



Illustration 5: Lunch at Jam Burger

programed by six teams. At the end all parts were working together and work pieces in three different colors were processed through the system. There was also a work station with two water tanks connected by pipes, different kind of valves, sensors, a heating and a cooling system and a pump. For this setup the last task was to design a program to control the level and temperature in one tank. The task was to cycle the water through the system with constant temperature of 30 degrees Celsius. To realize this, we needed to use a thermometer, a heater and a cooler.

At noon we had a lunch break for around 1 hour. Most of us went for lunch to a fast food restaurant which is located direct next door and was recommended to us by the local students. We were all very amazed by the very low price and the good taste of the burgers. About 5 o'clock we finished our group work for the day.

In the evening the group split apart and some people went for dinner and a beer in the hotel restaurant. The restaurant of the hotel was the best rated at Tripadvisor, so we expected something good. Nobody got disappointed and that wasn't the last day some of us had dinner there.

## Campus Tour at RTA and bowling, Tuesday, November 14<sup>th</sup>

Tim Krüger

Like every day we went to RTA early in the morning. The first Latvians were already present and we started to continue our group work. The group members had very different knowledge in PLC Programming but in almost each group was one guy who had some experiences except the group with Maurice and Roman. They had a very complicated system (pneumatics and hydraulics, different valves,...) which should work as an elevator.



Illustration 6: Lunch at the canteen of RTA

For lunch we visited the canteen. It is a room that is not even as big as a lecture room in our university. It is relatively dark, but nicely decorated.



Illustration 7: remodeled robot vacuum cleaner

After the lunch break, which had an undefined length that day, we went back into the lab puzzling at our tasks.

At 6 pm, Andris Martinovs guided us through the new engineering building. In the basement he showed us quite enthusiastically labs. There are three large labs of the different areas with about twenty different experiments.

Most of the technical equipment comes from Germany and have German inscriptions.

There is also an big area with several computer-controlled milling machines and another room students can work on their own projects f.e. building and programming combat vacuum cleaner robots. We saw students working until nine o'clock in the evening. Later we saw the chemistry lab, the Latvian professor said that they are producing their cocaine, check the quality and burn it here. That was a good joke.



Illustration 8: Samples in the chemistry lab



Illustration 9: programmable water cycle model

The most inspiring system was the experiment that simulated a wave or the experiment which simulates a sewage treatment plant.

After that went to the laser center which is located in another building. Some lasers are also from Germany. A Latvian student roughly explained how the different lasers work and for which different materials the lasers are applied. He also told us that the laser from China was broken when it was delivered. But they did not



Illustration 10: Laser system in the laser center of RTA

sent it back as we would had done, they repaired it by themselves because that did not need so much time. The most interesting laser in this building was modified to color aluminum or stainless steel in each color you wish and the color does not depend on the angle you look on it.



Illustration 11: colors which can be produced with the laser

After that campus tour, we decided to go bowling with a few Latvians. On our way to the bowling alley, we realized that the Latvian people are still heating

their rooms and houses with wood. Everywhere the chimneys smelled.



Illustration 12: German and Latvian students in the bowling center in Rezekne

When we arrived at the bowling alley, we first thought they were closed, but in all the shops here were just a few people in, however, they were open.

During the bowling we had pizza and some beer and a lot of fun with our Latvian colleagues. Back in our hotel some of us went downstairs to the conference room and

ended the evening with cards at an apple spritzer. At 4 o'clock in the night the day was over for the last us.

## Finalizing the projects and game day, Wednesday, November 15<sup>th</sup>

Roman Reim und Clarissa Stremel

The Wednesday started at 9 am. Some of the groups kept working on their stations while others already started preparing their final presentation.

Due to the complexity of the elevator the assigned group took 2 days just to adjust the components, connect the electronics, hydraulics and pneumatics. On Wednesday we finally could start programming the lifting of the weight, the doors of the elevator and the display.

Our Day at the University of Rezekne ended at 5pm.



Illustration 13: elevator system



Illustration 14: German and Latvian students at Klondaika

Afterwards we had time to spend for activities we choosed.

After arranging with the Latvian students half of our student went to "Klondaika", a bar in Rezekne. Playing several games like Pool or Jenga, get to know each other and enjoying the night life.

The other students met at the hotel Kolonna, playing cards, having fun and relax.



Illustration 15: German students and Mr. Beckmann playing cards in our hotel

## Field trip and folk dance, Thursday, November 16<sup>th</sup>

Sarah Hilfers

That Thursday morning, some of the German students chose to sleep some more minutes than having breakfast. So in comparison to the days before we went continuously separated to the Rezekne Academy of Technologies. While some of the German students tried to accelerate their morning routine, the other students were already setting their final implementations in the program. After a while most of the groups started to prepare the presentations.



Illustration 16: Lake Lubana

Moreover, Andris had to answer the question how we should structure the presentation a couple of times. Some of us had already done the presentations about a day before, but most of us just finished the presentations till lunch. A lot of German and Latvian students spent the lunchtime at Jam café. At 1:15 with a delay of 15 minutes the bus finally started to the plywood fabric named VEREMS which employs about 300 employees.

We watched the production steps while a skilled worker guided us from station to station. The tree trunks were put into hot water and afterwards peeled into wooden sheets. These wet sheets were dried first and then split into quality classes. The wooden sheets are layered

perpendicularly and glued at high pressure and high temperature. Some of these boards were also coated afterwards. The excursion finished with a stop nearby a lake called Lubāna.



Illustration 17: traditional folk dance in auditorium

At 4 pm we met in the auditorium at RTA for an official event. The honoring of staff and students was accompanied by music and traditional folk dance.

Subsequently we checked the stations in the laboratory and the presentations the last time

and finished what we hadn't up to then. Afterwards most of the German students and some Latvian students went to GORS nearby the hotel and had diner.

Unfortunately, three students had to stay at the Rezekne Academy to keep working on their challenging station till 9 pm. Meanwhile another group of student’s clink glasses to the end of a working day at the restaurant named Marijas Kafija, that restaurant we visited several times.



Illustration 18: German and Latvian students at GORS

Those who spent so much time eating and drinking at GORS had to hurry afterwards buying some drinks and snacks on time at RIMI. Eventually at 11 pm we spent time together playing cards and touching our glasses to Latvian and German friendship in the anteroom of the sauna area of the hotel. Up to that moment we couldn’t guess that the Latvian hospitality will be at its best. We were invited to Aleks’ home to celebrate and go into his sauna all together on Friday, the last day in Latvia.

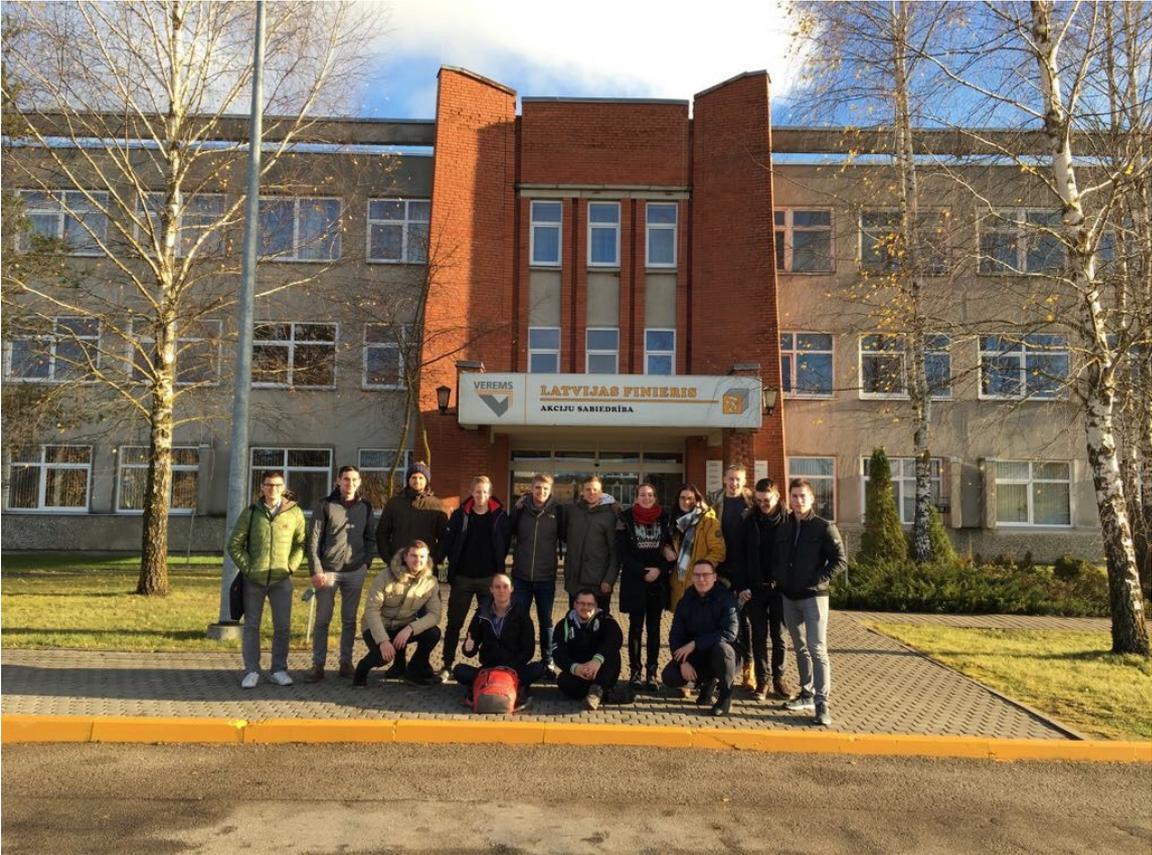


Illustration 19: German and Latvian students in front of the plywood factory

## Final Presentations and music museum, Friday, November 17<sup>th</sup>

Gerd Ommen

The Friday began like usual with the breakfast at 7 am. After that we used the remaining time till 10 am to prepare our presentations and performance.

At 10 am each group started to present their project and answered some questions. After the theoretical presentation we went into the laboratory to show the result of our work practically. At the end, we received a certificate about our project.



Illustration 20: Graduation presentations in college

In the afternoon we visited a museum for old traditional music instruments. Each of us got the opportunity to try out the different instruments and even play together. It was a very interesting experience and we had a lot of fun there.



Illustration 21: Old brewery

Next to the music museum is an old brewery for homemade alcohol – also like a museum. After running the distillation process twice through the whole system the result was a 75% of alcohol moonshine.

At 2 am our last day at the University of Rezekne ended with tons of new experience.

In the evening all of us visited Alex, one of the Latvian students, at home. He lives in a small village outside of Rezekne. He invited us to relax at their traditional sauna and even to cool down at the lake next to their property.

Friday was also the day to say goodbye to the Latvian students.

## Vilnius, Saturday, November 18<sup>th</sup>

Maurice Samson, Florian Wessels



Illustration 22: Cathedral in Vilnius, the capital of Lithuania

On Saturday the 18<sup>th</sup> of November we woke up at 7:30 am. The weather was cloudy and cold. We were picked up from Rezekne at 9 o'clock by bus and drove to Vilnius. Some of us didn't had breakfast, because we had a little party with students from Rezekne the night before. The trip back to Vilnius was smoother than the ride from Vilnius to Rezekne 6 days before, probably because most of us were sleeping. We arrived in Vilnius at 1 pm. The weather in Vilnius was also cloudy and cold.

The rooms in the hotel Ivoluta were big enough for two people and the bathroom was clean. We remained there for one hour and afterwards we went to the city, looking for something to eat. We found a small Italian restaurant, where we warmed up and ate good pizza. We walked around Vilnius and found a small market where you could buy nearly everything like socks, souvenirs, hats and so on. It was quite similar to a Christmas market in Germany.

After walking down the street for some minutes we saw the catholic church of Vilnius. Some of us took a step inside. This church is not like others, because the belfry is not above the church. The tower is in front of the main entrance. We went upstairs. The view over Vilnius was really breathtaking from the tower.

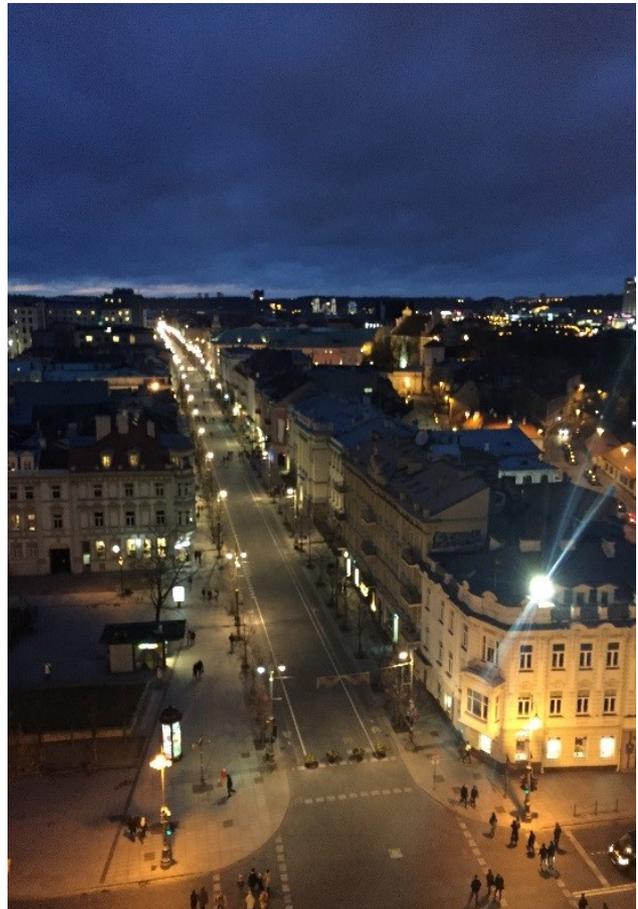


Illustration 23: View from the belfry of the cathedral in Vilnius

## Back in Germany, Sunday, November 19<sup>th</sup>

Pascal Fritsch

In the morning at 8 o'clock in Vilnius everyone met to check out of the hotel. After that we drove by the taxi to the airport. And ones again we needed to check in to the flight.

Because we still had a little time to fly, we visited the shops at the airport. Then we slowly got on the plane to fly back home. After the almost two-hour flight, we landed safely in Bremen, picked up our luggage and drove home.



Illustration 24: Students before departure in Vilnius

The whole week was fully packed with travelling, working on the projects, sightseeing in Rezekne and the surrounding area and Vilnius, spending time with the Latvian students and other appointments. There was only less time to rest but all of us are happy to receive so many impressions of people, culture, studying in Latvia and a lot more.