Final report

Name of intern: David Cicchetti

Home University/Country: University of Tübingen/Tübingen, Germany

Subject: Neuroscience/Cognitive Science

Guest University/Country: Vilnius University/Vilnius, Lithuania

Name of supervisor: Dovile Šimkutė

Part 1: General Information

1.1.   Application (motivation)

I applied to this internship because of the opportunity to learn more about cognitive science experimentation using EEG methods, including data preparation and analysis, while also experiencing this in a new country and culture.

1.2.   Preparation

To prepare for my trip to Lithuania, I looked at online resources about Vilnius and Lithuania. I did not study the language in advance because it is quite difficult and there was not much time for this, however I did learn basic vocabulary to manage common interactions. It is also good to understand how to pronounce the alphabet, since it will save you some trouble when naming places or objects you need, food, etc. As preparation for the internship itself, I looked mainly at the lab website and the papers they had published and also those from other labs of the department.

1.3.   Travel

There was some rearranging with flights due to Covid-19, but this was manageable, and I flew into Vilnius and back

1.4.   Accommodation

For accommodation I chose an Airbnb apartment that was very reasonably priced and well located near both the University and the Old Town with great bus connections and plenty of

shopping nearby. The apartment provided all necessary amenities including a washer and I was very satisfied with communication with the host.

1.5.   Life in Vilnius/Lithuania

Vilnius, the capital of Lithuania, is a very attractive, green city with friendly locals. With a population over 500,000, it radiates a 'big-city' feeling with many big streets with shops, cafes and restaurants in the old town, a lot of churches and multiple shopping malls outside of the old town. Most adult Lithuanians in Vilnius speak English if they are under the age of 40/50, otherwise they will mostly only speak Lithuanian and Russian.

The city has a very efficient bus/trolleybus network and there is the option to buy an International Student Identity Card (ISIC), which offers an 80% reduction for bus tickets making the tickets being extremely cheap (5.80 Euros for 30 days). If you are staying for more than a week, it is definitely worth getting an ISIC.

 Vilnius contains a lot of green parks, most notably Bernadine Park, a smaller, prettier and vibrant park close to the centre, and Vingis park, a large park with a forest atmosphere that also includes a stadium and sport

For another big city, there is Kaunas, the former capital, about one and a half hours away by train. Klaipeda is the next biggest city after Kaunas (about three hours away). For other sights there is the Trakai castle (about 30-40 minutes by train) and Anyksciai with nice forests and scenery nearby. There are small hills up to about 300 metres, forests, rivers and lakes, and even beaches around the area of Klaipeda.

Left: View from a tower near Anyksciai; Right: Lake near Trakai castle

Left: View of Vilnius Old Town from Gediminas Tower; Right: Cathedral and Tower in city center

Part 2: Information about the project and task

2.1.   Research Project

I was working on a PhD project investigating electroencephalography (EEG) readouts of brain activity in subjects who had excessive internet usage versus subjects with normal internet usage, to reveal any EEG detectable differential effects on brain activity.

The research aims to help clarify potential neural markers indicating effects of problematic internet use which may be useful for early clinical assessment/intervention.

2.2.   Colleagues

I got along very well with my supervisor, the group leader and colleagues in the lab. I also was able to meet people from different labs within the department, who were also very friendly and showed me their work/lab upon request. I was also able to meet with my supervisor and/or colleagues for leisure occasions.

2.3.   Research Institute

I was working at the Life Science Centre in Saulétekis, Vilnius. More specifically, in the department of Neurobiology and Biophysics, which is part of the Bioscience Sector. The building is very modern (built in 2016) and contains offices, labs (EEG, eye tracking, physiology), a cafeteria, equipment and kitchenettes for staff. One of the University libraries is very close by and there are also other faculty buildings and student dorms in the area.

2.4.   Experience working within the project

My work within the project was diverse, including things such as preparing participants for EEG experiments, attending online conferences & workshops and reading literature concerning the project. In the end I was also able to analyse questionnaire data and EEG data and execute a basic machine learning classifier on EEG data with the aim to classify subjects with low Internet

addiction scores from those with high Internet addiction scores. It was mostly quite flexible and I was able to independently come up with ideas on what to do for the project and had helpful discussion with my lab hosts about the work.