

Essay

Hello, my name is Hamza Waheed. I am a 24 year old master's student studying mechanical engineering at UNC Charlotte. The Transatlantic Energy-Research Experience (TE-REx) gave me the opportunity to visit Germany, ultimately allowing me to experience a completely different culture in a very unique and eye opening way.

My stay in Germany lasted for around 90 days. During this time, I worked for wbk Institut für Produktionstechnik on a project titled "Surface Roughness Modeling and Automated Process Optimization of Stream Finishing for Additive Manufactured Parts." My time working for my project was enjoyable. My project required me to learn new skills I have never had to use before. Nonetheless, I did learn a lot about this field and in particular I learned to some extent how to use discrete element method (DEM) software. My project also forced me to figure out how to stitch images together, in addition to learning how to take measurements using various online softwares. This project also helped me improve my microscopy skills.

Despite my lack of interest in my main project, I found another interest in traveling. I am grateful to UNC Charlotte and KIT for giving me the opportunity to come to Germany, due to my visit to six different countries in Europe. This allowed me to experience different aspects of Europe, such as Belgian chocolate and Netherland fries, that I was not aware existed in the United States. Even more importantly than the food I tried, travel allowed me to learn more about my own culture and meet different people of different backgrounds and learn about their challenges and struggles.

However, even more eye-opening than the opportunity to travel to other countries, was the trips organized by our student mentors Amara and Victoria. Having the opportunity to go to Munich and Berlin was very eye opening. Before leaving here, my mom told me to make sure that you see a concentration camp. Sure enough on the Munich trip that opportunity came. Victoria told me that there is a concentration camp 16 km north of Munich called Dachau. I realized that this is a must for me to visit, due to the fact that this is a once in a lifetime opportunity. Going to Dachau gave me a more real-world understanding of the Holocaust, as well as the extent to which the Nazi's committed the greatest human rights violation mankind has ever known.

However, even more interesting than Munich was Berlin. On the weekend of July 29th, I had the opportunity to visit the capital of Germany. I found this experience even more eye opening than Munich because of the way the city was set up. In most of the cities in Europe that I traveled to, most of the tourist attractions are in the center of the city. However, in Berlin, most of the tourist attractions are spread out across the city. Unlike Munich, an official Berlin

tour was not planned in advance. However, this turned out to be a blessing in disguise, because Victoria told our cohort about an app called GuruWalk. Ultimately, GuruWalk allowed me to set up free tours within Berlin, allowing me to quickly plan what to do during my two night stay. The tours I booked were related to the Berlin Wall and the Nazi Regime. I found both of these tour's interesting because, for many aspects of the Berlin Wall and the Nazi Regime, many places were not made as memorials that I would have expected it should have. For example, there is an abandoned bridge that has plants growing all over it. In addition there was a building that was used where the Nazi propaganda machine was headquartered that today houses a Chinese restaurant.

One of the best things about Germany that I can appreciate is the Döner. Upon arriving in Germany, I learned about Döner and how common kebabs and shawarmas (yufka) are. As a result, I got very excited to try it because the last time I had a good shawarma was about 10 years ago in Chicago. While the shawarma in Karlsruhe does not really compare to an authentic one, what I found was the price I paid for the yufka was definitely worth it. In addition to it being very tasty as well. However, even better than the yufka were the Eiscafes. I remember someone from last year's cohort telling me that you must try the ice cream in Germany. Taking his advice, I went out on Kaiserstraße and saw the ice cream store. I found a selection of flavors such as Raffaello, Ferrero Rocher, and Bounty. I have never seen such flavors in the United States. Upon trying ice cream in Germany, I found it to be much tastier than the ice cream found in the States. Even more importantly, I learned about how tasty food can be without adding too many spices. The KIT welcome dinner at Badische Brauhaus gave me some insight into German cuisine. There I learned about flammkuchen, turkey salad, schnitzel, spaetzle. I found each of these food items to be very tasty. The country that I come from, Pakistan, uses a lot of different and exotic spices when cooking food. To experience a change, especially one that I found was very mind expanding.

Last but not least, I wanted to write out this one final paragraph to thank the entire program for making this trip possible, as well as giving special thanks to certain individuals that I have had more contact with. I want to thank our student mentors, Amara and Victoria, for setting up appointments with the city, helping us set up my bank account, organizing our trips, and answering our questions related to Germany. As far as immigration is concerned, I appreciate the help of Mina for ensuring that our visas are processed properly, as well as helping to make sure that I got my stipend from KIT. Furthermore, there were many individuals that did much for our cohort behind the scenes such as driving us from KIT to campus north on

orientation day, leading the orientation day, and so much more that unfortunately cannot be mentioned for the sake of brevity of this essay. I am very grateful to those people as well.



Trip to Munich



Trip to Berlin