

Internship Report: Autumn 2023

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IAESTE Internship at CEFET-MG, Brazil

During the autumn of 2023, I had the opportunity to participate in an IAESTE internship at the Centro Federal de Educação Tecnológica de Minas Gerais (CEFET-MG) located in the city of Leopoldina, Brazil. Leopoldina has a population of about 50,000.

As a mechatronics engineer, I worked with the Foundation Fieldbus didactic plant, a machine used to simulate three critical industrial processes: level, flow, and temperature. This didactic plant is used by students during different lectures to learn about control systems and have a first experience with machines they will encounter in the industry. My responsibilities included conducting maintenance on actuators and sensors to ensure effective communication with the computer systems using the OPC protocol.

I'm very proud to have taken this opportunity, to travel alone to a new country and experiencing a new professional and social environment. I'm also very proud to have helped and contributed to the university I attended. Brazilians were very friendly and kind to me, and I believe the project I participated in was really important for them and will help many students in the future.

While working at CEFET-MG, I compared this experience with what I'm used to in my home university, ETH Zurich. The smaller lecture rooms at CEFET-MG created a more familiar atmosphere, allowing closer interactions between students and professors, resulting in more personalized help. It also surprised me that classes took place during day and night hours.

Language presented both a challenge and an opportunity. While my supervisor and some colleagues spoke English, and a few friends knew Spanish (my mother tongue), much of the communication outside the university was in Portuguese. Over time, I learned to understand Portuguese, especially when spoken slowly, and when I spoke Spanish slowly, the understood me as well. This form of communication is called "portuñol."



City of Leopoldina



Foundation Fieldbus Didactic Plant



Campus of CEFET-MG

The technology at CEFET-MG was not the newest, which posed certain challenges, especially in programming and maintenance tasks. The absence of documentation added to the complexity, but I found my way through these challenges and adapted to the situation.

The project often required me to work independently, with occasional support from my colleague and supervisor. This autonomy was not new to me and allowed me to effectively manage my time and tasks.

I really enjoyed the social aspect of my stay too. The presence of a student campus allowed me to be surrounded with people around my age. Brazilians are very open and friendly and like to have conversations. The fact that I was a foreigner surprised them all, and I felt really included in their activities. Leopoldina is not a big city like São Paulo or Rio de Janeiro where there is a party every week. Instead, after university, we used to go to a bar to talk, eat, drink, play billiard or watch a football game. Of course, every couple of weeks there was a big event, such as a concert or an activity organized by CEFET. I cheered my friends football team at night during the CEFET football tournament of the semester.

The food was also great. Brazilians really like rice and beans, being part of their daily meals. Many restaurants where I was were buffet style. They also really like Churrasco. During our stay at the bar, we usually ordered fried food which was really good too.

Leopoldina is close to an ice cream factory. In many corners of Leopoldina there was an ice cream shop, all from the same company. This is understandable because Brazil is very hot as well. I decided to try the different flavors during my stay, and there were over 40 flavors. I also discovered açai, a very good frozen drink that I enjoyed very much.

However, there were some cultural shocks. In Brazil, avocados are sweet and not salty like I'm used to. My initial attempt at making guacamole resulted in a surprising yet memorable experience. Another shock was going with my friends to eat pizza. The Brazilian approach to pizza includes mayonnaise and ketchup as toppings. I tried it and I have to say that I liked it.

Participating in an internship through IAESTE offered certain advantages. IAESTE provided a well-structured internship placement and arranged accommodation, ensuring a smooth transition. IAESTE also facilitated communication with other exchange students in Brazil.

In smaller countries, IAESTE tries to have all their exchange students close together. This is not the case for Brazil due to its vast geography. In fact, I was the only exchange student in Leopoldina, but during national holidays and weekends where I decided to travel around, I could contact other IAESTE members to meet them and enjoy that time together.

My IAESTE internship at CEFET-MG in Brazil was very fun and I enjoyed it very much.



My football team "Bar-sin-Lona"



Trip to Rio de Janeiro