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## MEINE DEUTSCHE ERFAHRUNG,

I was attached at the Institute under DAAD-IAESTE internship program and the project I was assigned involved: Familiarization with multi-step additive manufacturing technologies, Involvement in the construction and setup of an extruder print head to mix a binding media with raw powder material; Programming of the control unit for an extrusion-based printer prototype; Fabrication of green parts (samples consisting of binder and powder material) for material testing. The internship basically involved 3D printing an additive technology used to manufacture parts. It is 'additive' in that it doesn't require a block of material or a mold to manufacture physical objects, it simply stacks and fuses layers of material. It's typically fast, with low fixed setup costs, and can create more complex geometries than 'traditional' technologies, with an ever-expanding list of materials. It is used extensively in the engineering industry, particularly for prototyping and creating lightweight geometries.

Germany is a highly industrialized country with brands like Siemens, BMW and Mercedes dominating the market and as a mechanical engineering student it's the place to be, I gained new professional skills and was introduced to emerging technologies (3D printing, integrating Marlin Firmware using VS Code) practical application of multi-step sintering processes starting from solvent to thermal debinding concepts theoretically covered in the curriculum.

In keeping with IAESTE's motto "Taking Cultural Experience Beyond Kenya's Borders". I met people from all nationalities, since Munich is a very cosmopolitan city and English is widely spoken I never struggled. I tried food from all over the world and particularly liked German food and was impressed how punctual everyone

was. I also travelled to 6 other countries in my free time, The European Union a brilliant idea and I think East African Community should integrate even more. I have been an IAESTE member for 4years and in this period I made friends and made linkages thus during my stay in Germany I had a decent number of contacts.

Munich is a historic city and capital of Bavaria, I toured various attraction sites like: Marienplatz, Nymphenburg Castle, Olympia Park, BMW Museum, Alte Pinakoteck Art Museum, English Garden, Deutches Museum, hiked the Bavarian Alps and least forgetting Dachau Concentration Camp a somber memorial for all the victims of WW2 horrors.

I travelled to the German cities of: Bochum, Essen, Cologne, Bonn, Dresden (hiked the Saxonian Swiss) and lastly Nuremberg. I also travelled to; Hungarian cities of Debrecen and Budapest, briefly stopped at: Prague Czech Republic, Bratislava Slovakia, Venlo Netherlands, Vienna Austria and on a weekend visited Warsaw Poland. On Christmas break I spent with a friends' family in Schladming Austria on the Alps and went skiing, experienced Christmas away from home for the first time but never felt homesick due to the warmth and great hospitality of the Austrian people.

Overally I gained technical skills and was introduced to emerging technologies, experienced new cultures, met new people and travelled even on the backdrop of the COVID 19 pandemic. I have gained more passion and motivation towards my aspiration for furthering my studies in the field (Additive Manufacturing) and I would highly encourage all students to apply for the internship given the opportunity.