1. **200 word essay on your scientific biography and work history:**

After my bachelor’s I have worked as a Software engineer at Accenture. I have undergone training in programming languages C, C++, SQL, and python. My tasks here include retrieving the test data using SQL, creating, designing, and executing test cases using TOSCA(an automation testing tool).To improve my lab skills, I did a voluntary internship where I learned immunochemical staining methods. I participated in a research project to build a biosensor. My tasks here include immobilization of the antibody on the sensor chips and helping in dilutions during the testing of the sensor.During my Masters, I worked as a student research assistant at RWTH Aachen University. I was involved in both lab and homology modeling. I did experiments on the P2X receptors include DNA cloning, plasmid preparation, miniprep, midiprep, and Transformation. I did the homology model of these receptors to find the binding interactions. This model is built by using MODELLER software and the side-chain modeling is done using SCWRL. Hydrogens are added to the structure using the PDB2PQR web server and finally, the minimization of structure is done by using GROMACS. The homology model is then analyzed using Pymol tools and MDAnalysis.

1. **Describe your research interests? 41 words**

My research interest is to implement computational approaches MD simulation and Docking to solve the experimental questions in my future research

1. **Describe how this course will benefit your own research? 35 words**

This will help me to be able to utilize MD simulation to understand the molecular and structural mechanism of P2X membrane proteins This course and that the course will be instrumental you to continue your current studies at the Ph.D. level.

1. **Describe how this course will benefit the research of your group?30-35 words**
2. **List any relevant molecular modeling software tools and resources you currently use?**

Modeller, SCWRL4, MDAnalysis, Jupyter notebook, Ubuntu and Pymol.