Since childhood, I have been heavily inclined towards machinery and have constantly wondered about how they were built and how this contributed to their functionality. Being interested in design of machinery, I took part in several drawing competitions in school that helped me work on my drawing skills and enabled me to develop accuracy and attention to detail in my diagrams. With a keen interest in physics in school, I participated in several science exhibitions where I developed a working prototype of a windmill. This experience helped me grasp several important concepts of physics and I came to know the challenges one might face in building a prototype of any machine. My interest in science and experiences with machines in high school motivated me to study Mechanical Engineering in college which further enhanced my knowledge and renewed my passion for the subject. Having spoken with my Uncle who has pursued his postgraduate education in Germany, I have realized the difference in education between India and Germany and wish to explore the practical aspects of the field in a research-driven environment. Hence, in order to acquire advanced knowledge and skills in my field of interest, I wish to pursue a postgraduate education in Mechanical Engineering.

Being an avid automobile enthusiast since a young age, my love for machines has culminated in an intense desire to understand the design and working of different types of automobiles. In order to explore this field further, after completing high school, I decided to pursue my undergraduate education in Mechanical Engineering. During this period, I thoroughly enjoyed my course on Automobile Engineering through which I acquired in-depth knowledge of the structural and functional components of automobiles and how to design them using specialized software. I found my course on Project Management and Operation Research very useful as I learned the calculations involved for the appropriate utilization of resources. I also learned how to apply research techniques to industrial operations using which I can design automated equipment and optimize manufacturing processes in industries.

Eager to practically implement the concepts I had learned in my theory classes especially in the field of automobiles, I undertook the investigation of performance characteristics of biodiesel blends of waste cooking oil in a diesel engine. For this, I used crude waste cooking oil for the preparation of biodiesel and tested it on a diesel engine in Ahmednagar comparing it with standard diesel characteristics. This work instilled in me the importance of an optimally performing diesel for reducing costs, increasing mileage, and reducing damage caused to the environment. Also, as a group leader for this project, I had a huge responsibility of making sure the project milestones were completed on time. This helped me develop essential leadership and communication skills, and accountability for my duties. As most of my undergraduate coursework was theory-oriented, this project gave me a chance to practically explore the important characteristics of automobiles and acquire an in-depth understanding of their design characteristics.

Wanting to get a real world perspective of manufacturing industries, I visited Laxmi Agni Components and Forging Pvt Ltd, where I observed several equipment and manufacturing processes such as CNC machines, lathes, hot forging, and cold forging. As this company is a manufacturer of three-wheeler crankshafts, it was a wonderful opportunity for me to improve my knowledge in the field of automobiles and to view the specific processes that are used in these industries. Apart from this, I have attended the CNC Milling Programming training conducted at the Indo-German Tool Room, Aurangabad,

and another training program on the HVAC, MEP Revit design software conducted at the Design and Draft Institute, Aurangabad. Both these courses were taken out of my own initiative to build a strong skill set in designing and programming machinery to achieve high quality performance and automation in the manufacturing industry. My learning through these courses has helped me widen my perspective on the design processes and software available for conceptualizing innovative and beneficial designs for machinery.

Throughout my undergraduate period, I have taken the initiative to explore different aspects of Mechanical Engineering in order to improve my knowledge in this area. Now, wanting to pursue research in this field, I intend to initially go for a postgraduate program in Mechanical Engineering as this will help me acquire in-depth insights into the recent trends in this field. After completing my higher education, I would like to pursue my doctoral program in the field of aeronautics, aerodynamics, and turbo engines as this will help me streamline my interest in automobiles and enable me to focus on a specialized area in this field. Eventually, I would like to work as a General Manager in an established automobile manufacturing company where I intend to use my knowledge, skills, and experiences in contributing to the technological revolution of this age.

In order to fulfill my goal of contributing to the design and development of automobiles, I wish to take up a postgraduate program in Mechanical Engineering at _____ University. The numerous research projects that I have worked on and the internships and training programs I have attended during my undergraduate period have given me a strong command over the concepts. I now wish to deepen my understanding of the field and become up-to-date with the most recent trends in the field of automobiles. I intend to acquire a strong technical skill set by pursuing several exciting and challenging projects at your state-of-the-art research facilities. Being guided by accomplished faculty such as _____ and _____ at your premises will help me take my projects to the next level and acquire a more comprehensive understanding of the field.

My experiences in using my knowledge and skills for several design and construction projects have given me a strong knowledge of my subjects, and I am confident that my aptitude and passion for the field of sustainable architecture will help me stand out at your campus.