My name is Sahana S Madival, and I am currently pursuing my Bachelor of Engineering in Computer Science and Engineering at Sahyadri College of Engineering and Management, Mangalore. From the very beginning, I was very fascinated by the various methods used to solve real-world problems and create change. Even as a child, I was very curious about how things worked around me. Growing up in a supportive family, I was fortunate to be supported in this curiosity, which nurtured my love for building, experimenting, and problem-solving. My first encounter with computers sparked the turning point in my life. I did not have a personal computer at home, but whenever I got access to one, I explored as much as I could. Watching my cousin work on a computer made me think about how a machine could type, calculate, and even create. This curiosity grew into determination, and I began learning about various technologies in general. As I have continued through my studies, this interest has only deepened, and this curiosity has motivated me to pursue a Master's in Artificial Intelligence at the Indian Institute of Science (IISc), Bangalore, an institution that I deeply admire. I see this program as an ideal match for my career ambitions, providing me with the knowledge and opportunities required to grow into a skilled professional capable of solving real-life problems.

Although I am still in the process of completing my undergraduate studies, I have been actively preparing myself for a strong foundation and to meet the demands of a postgraduate program. Many of the courses have provided me with a solid foundation in areas such as data structures, algorithms, databases, computer networks, and other programming languages such as Python, C, and Java. These subjects gave me a strong base, but what excites me most is learning beyond the classroom. I often explore topics on my own to understand how things actually work in practice and how they can be applied in new ways. This curiosity pushed me to take part in projects, hackathons, and problem-solving competitions, where I could see how theory can be applied to real-world problems. These experiences helped me build my technical skills, but also showed me the joy of building and pushed me to think differently.

One of the most meaningful experiences in my academic journey was working on a social innovation project for visually impaired individuals. This project gave me the chance to bring together technology and empathy, gave me a deeper sense of purpose, and opened my eyes to various technologies that can be used to make life more inclusive and accessible. The project pushed me to grow technically, but more importantly, it gave me a sense of direction that I want my work to contribute to society. Since then, I've been deeply motivated to explore more things to improve my project so that it is more efficiently deliverable to society, thus helped me explore various areas of interest like Computer vision and machine learning, where technology and human impact come together. Working on different projects has taught me lessons that go far beyond coding or technical knowledge. I realized that no project ever goes exactly as planned; there are always unexpected errors, sudden delays, or times when an idea that seemed promising on paper doesn't work in practice. In the beginning, I found these situations frustrating. Spending hours debugging code only to see it fail, or having to change our approach after weeks of effort, completely, often felt discouraging. But over time, I started to see these moments differently. Each setback became a kind of teacher. Much like in chess, where a single wrong move can change the course of the game, these experiences pushed me to pause, think differently, and try again with a new perspective. They taught me the importance of patience when solutions are not immediately clear, persistence when progress feels slow, and adaptability when plans need to change. I learned that true progress often comes after repeated attempts, trial and error, and moments of doubt.

What excites me most about pursuing a Master's in Artificial Intelligence is not just the idea of studying advanced algorithms or exploring complex models, but the chance to push myself beyond what I know today. I want to go past the basics I have already learned and immerse myself in machine learning,

deep learning, and sustainable AI systems — to understand how these technologies can be used to solve problems that matter to people. The thought of sitting in a classroom or lab, surrounded by equally curious peers, experimenting with ideas, and seeing them grow into real solutions fills me with energy and hope. For me, the true power of technology is not about building something futuristic or complex that only a few people can access. It is about creating solutions that are practical, affordable, and meaningful. I believe AI has the power to reach into these lives, and I want to be someone who makes that possible. This is why I feel so strongly about advancing my knowledge in Artificial Intelligence. To me, it is not only a career path but also a way to contribute something valuable to society. I want the skills and knowledge I gain to help me build technology that is inclusive and impactful, technology that touches lives in ways that truly matter.

In many ways, this Statement of Purpose is the story of my journey from a curious child who loved taking apart toys to understand how they worked, to a student who discovered the joy of building projects, and now to an aspiring researcher determined to make a real difference with technology. I know the road ahead will be demanding, but I am ready to embrace those challenges with persistence, creativity, and hard work. What I carry with me is not just an academic foundation and project experience, but also the values of teamwork and a genuine passion for using AI and Machine Learning to create meaningful impact. If I am allowed to study at IISc Bangalore, I see it not only as a chance to learn but also as a responsibility to contribute. I want to bring my curiosity, ideas, and energy to the institute's vibrant community, while also learning from the incredible people around me. I look forward to the late nights spent solving problems, the thrill of collaboration, and the moments when ideas finally turn into solutions that can touch lives.