I graduated with a Bachelor of Science in Electrical and Computer Engineering from Effat University in 2022. During my studies, I took an elective course in Renewable Electrical Energy, and I found it quite compelling. I learned about renewable energy resources such as solar, wind, hydropower, geothermal, and biomass. I also learned about storage technologies and their effect on the smart grid. I find it quite fascinating that we can use natural energy resources and convert them into electricity, and the course made me want to specialize more in this area. Because of that, I decided to apply for the Master of Science in Renewable Energy Systems Engineering at the University of Surrey. Moreover, I chose it because, in recent years, there has been an increase in demand for renewable energy as part of the Sustainable Development Goals to reduce greenhouse gas emissions that contribute to global warming, which is a major global challenge. Because of this, efforts are being made to reduce dependence on fossil fuels, and I want to be part of developing sustainable alternatives for a better future.

While studying Electrical and Computer Engineering, I developed a strong foundation in engineering, mathematics, and science. I developed my computer skills by using software such as MATLAB and NI Multisim. Since many of my courses involved group projects, I gained collaborative experience. I also developed research and presentation skills. I participated in Effat’s Student Research Forum in 2020 by presenting a project I completed for my control course. I built an obstacle detection and line follower robot for the project using Arduino. I also presented my research paper at Effat’s 19th Annual Learning and Technology Conference (L&T 2022). The research paper was part of my graduation project, and it was titled "Power Quality Disturbances Identification using Wavelet Decomposition and Machine Learning." The paper was accepted for publication in Procedia Computer Science. For extracurriculars, I volunteered at Effat University Career Day. I was responsible for distributing the event flyers on the first day. And on the second day, I entered the guests' details into an Excel sheet. I joined the Effat University reading club because I like to read books in my free time, especially novels.

I became interested in the University of Surrey when I attended an event for UK universities in Jeddah and spoke with Adam Stockley, an International Officer; he was friendly and gave me all the information I needed to know about the university. The first reason I chose the University of Surrey for my Master's degree is that it was named the University of the Year for Graduate Employment in 2022. Secondly, the university is well-known for its excellent engineering programs and facilities, particularly the Chemical and Process Engineering Department, which houses the Fluor Pilot Plant. It is a rare facility that will give me hands-on experience with a fully operational industrial plant. Another thing that attracted me to the university is its culturally diverse and sustainable campus. What appealed to me about Guilford is the beautiful green countryside, with most places being a walk or a short bus ride away, which is better for sustainability. In addition, I appreciate that Guilford is just 34 minutes by train from London. I had the opportunity to visit London eight years ago, and it was one of the best vacations I have ever had. It would be an advantage to live close enough to go there occasionally.

I am confident that pursuing my Master's in Renewable Energy Systems Engineering would be an excellent opportunity to expand my knowledge, as it would invigorate my academic background further. This opportunity will provide me with the knowledge and skills needed for my career since I am planning to work in the energy and sustainable development sectors and get experience in this field. My long-term goal is to work with companies to develop renewable energy plants in my home country (Sudan) because there is a shortage in electricity generation. Sudan has a wealth of natural resources that can be used to produce energy, including the Nile River and bright sunlight. I am highly interested in the solar energy technology module because Sudan receives a significant amount of solar radiation, but it is underutilized due to the high cost of solar technology. As a result, I want to focus on making it more affordable and easily accessible in Sudan.

Finally, it would be an honor to be offered a spot in the Master of Science in Renewable Energy Systems Engineering at the University of Surrey. I am looking forward to contributing to the diversity and research of the University of Surrey. I am also eager to learn from academics who are experts in their fields. I am particularly captivated by Dr. Bahman Horri's work in hydrogen, fuel cells, and energy materials. I am also excited to meet students from around the world so we can interact intellectually and learn from each other.