Statement of Purpose - Yusuf Ibrahim

Application for KAUST Photonics Summer Camp (PSC)

I am excited to apply for the KAUST Photonics Summer Camp (PSC) as it presents a great opportunity for me to gain hands-on experience in photonics, quantum technologies, and optical science. As a final-year Computer Science student at Albukhary International University, I have developed a strong foundation in machine learning, deep learning, and computational mathematics. With a CGPA of 3.71, I have consistently worked hard to expand my knowledge and skills in areas related to advanced computing and optimization techniques, which are also important in the field of photonics.

Throughout my studies, I have explored various topics in computer vision, embedded systems, and mathematical modeling, which have strengthened my analytical thinking and problem-solving abilities. My Final Year Project (FYP) focused on AI-driven admission automation, where I applied deep learning techniques to real-world challenges. This project allowed me to see how advanced computing methods can be used to solve complex problems, and I am eager to explore how similar techniques can be applied in photonics research.

Beyond academics, I have actively engaged in research discussions, leadership activities, and technical workshops. As a Student Ambassador, I helped organize academic events and supported my peers in their learning journeys. I also participated in various university activities that improved my teamwork and communication skills. Additionally, as part of my degree requirements, I am required to complete a six-month industrial training program, and this internship at KAUST is an excellent opportunity for me to gain valuable research experience in a world-class environment.

I am particularly excited about the cutting-edge research facilities, mentorship opportunities, and workshops that KAUST offers. Working alongside experienced researchers and students will allow me to expand my knowledge in optical computing, neuromorphic systems, and photonic technologies. I am eager to contribute to research projects, participate in experiments, and develop skills that will help me in my future academic and professional career.

This program will not only deepen my understanding of photonics and optical science but also prepare me for future research in AI-driven photonic applications. Given my strong academic background, technical skills, and eagerness to learn, I believe I will be a dedicated and hardworking participant in the KAUST Photonics Summer Camp. I look forward to the opportunity to contribute, collaborate, and grow in this exciting field.

Sincerely,

Yusuf Ibrahim