## **Motivation Letter**

Dear Prof. Dr Georgia Chalvatzaki:

My name is Zhixiong Wang, and I will graduate from the Hangzhou University of Electronic Science and Technology with a major in computer science by April next year. I am writing to apply for the PhD project in the field of robotics safety at the PEARL group.

My undergraduate and postgraduate studies in robotic and machine learning have provided me with a strong foundation in computer science, mathematics, and algorithmic thinking, which not only equipped me with the basic knowledge necessary for this position but triggered my interest in the safety field of robotics.

To deepen my knowledge and achieve my academic passion, during my Master's degree, I actively engaged in various projects and led a couple of them. In my previous SLAM and robotics projects, I enhanced system robustness, which aligns with the objective of my upcoming security-focused project. Gathering data and conducting experiments on physical robots are also important for the following safety research. Furthermore, my experience with integrating deep learning into robotic systems in previous projects will be important for the forthcoming endeavor that combines reinforcement learning with control systems. My previous projects have resulted in the submission of research publications and patent applications.

My research experience has cultivated skills that align with the requirements of this position. My proficiency in C++, Python, ROS, and PyTorch makes me well-prepared to contribute to the development and enhancement of the safety field of robotics.

Having engaged in and led multiple small-scale projects, I possess experience in streamlined project management. Moreover, I have previously collaborated with a senior colleague on a project, which shows my ability to work effectively in a team.

Thank you very much for considering my application, and I am very much looking forward to hearing from you.

Sincerely, Zhixiong Wang