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Subject: Application for the Robotics Summer School at ETH Zurich

Dear Sir or Madam,

I am writing to express my interest in participating in the Robotics Summer School at ETH Zurich. As a PhD student specializing in mobile networks at the Institut Polytechnique de Paris (France), with a strong background in embedded systems and telecommunications, I am excited about the opportunity to expand my knowledge in robotics and explore its intersection with communication technologies.

My academic journey has been shaped by a multidisciplinary approach, combining electrical engineering, computer science, and networked systems. During my master's studies, I pursued research on real-time embedded systems, focusing on the challenges of ensuring reliability and efficiency in time-sensitive applications. This experience has greatly influenced my current PhD research on real-time scheduling for 5G NR SCADA systems.

My interest in robotics comes from its reliance on efficient real-time communication and control, which aligns with my expertise. During my undergraduate years at the Federal University of Espirito Santo (ES, Brazil), I worked on visible light communication (VLC) systems for medical applications, demonstrating my ability to design and implement innovative communication solutions for embedded environments. Additionally, my experience developing IoT-based monitoring systems in both academic and industrial settings has deepened my understanding of sensor networks, real-time data processing, and automation (i.e., key elements in robotics).

In addition, my contributions to engineering and innovation have been recognized internationally. I received an Honorable Mention from NASA for participating in a [lunar navigation challenge](#), highlighting my ability to tackle complex technical challenges. This recognition reinforces my commitment to pushing the boundaries of technology, a mindset I hope to bring to the Robotics Summer School. Participating in the Robotics Summer School at ETH Zurich would allow me to bridge my knowledge of embedded systems and mobile networks with practical applications in robotics. I am particularly interested in learning about real-time motion planning, autonomous systems, and networked robotics, as these areas closely relate to my research on low-latency, high-reliability communication for industrial automation.

I am eager to collaborate with fellow researchers and experts in the field, contributing my knowledge while gaining new perspectives to enhance my PhD research. Given ETH Zurich's reputation for excellence in robotics and autonomous systems, I am confident that this program will provide an enriching experience that aligns with my academic and professional aspirations.

Thank you for considering my application. I look forward to the opportunity to contribute to and learn from this prestigious program.

Sincerely,  
Alaf DO NASCIMENTO SANTOS