**TITLE**: **Verification of AHB 5 protocol using Universal Verification Methodology.**

**ABSTRACT:**

This project endeavors to verify the Advanced High-performance Bus (AHB) protocol using the Universal Verification Methodology (UVM). Through the development of a comprehensive UVM-based verification environment, I aim to ensure the correct functionality and compliance of the AHB protocol with its specifications. Utilizing reusable UVM components and functional coverage metrics, I will systematically exercise various aspects of the protocol to validate its behavior. By employing this approach, we seek to enhance the reliability and performance of AHB-based designs, catering to the needs of modern high-performance computing applications.