

A COMPARATIVE STUDY OF FLOW PATTERNS FOR NACA AIRFOIL PROFILES

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This paper investigates the computational behavior of fluid flow around various airfoil shapes. Utilizing computational fluid dynamics (CFD) simulations, we examine the aerodynamic characteristics of these airfoils under different flow conditions. By analyzing parameters such as lift, drag, pressure distribution, and velocity fields, we aim to gain insights into the underlying physics governing fluid-airfoil interactions. The results obtained from this study contribute to a deeper understanding of airfoil performance and can be applied to various fields, including aerospace engineering, wind energy and automotive design.