

Strengthening API Security: Behavioral Authentication and Intelligent Threat Mitigation with Data-Driven Models

Sri Rama Chandra Charan Teja Tadi

Lead Software Developer, Austin, Texas.

Abstract: *In an age marked by the rapid expansion of digital interactions and growing cyber threats, robust API security is a matter of utmost importance. Intelligent threat defense and behavioral authentication are emerging as promising trends in combating such challenges. This study explores how data processing methods and behavior biometrics can enhance user authentication and detect unauthorized access. Through its emphasis on the dynamic nature of user behavior and activity trends, it highlights the potential for designing adaptive security solutions that react intelligently to emerging threats. The article attempts to elaborate on the importance of behavioral intelligence and continuous learning in shaping the future of resilient API protection.*

Keywords: API Security, Behavioral Authentication, Intelligent Threat Defense, User Behavior, Data Processing, Adaptive Security, Continuous Learning