

Study on Artificial Intelligence and the Future of Zoology

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Abstract: *Artificial Intelligence (AI) has emerged as a transformative tool across scientific disciplines, with zoology-The scientific study of animals, has long been a cornerstone of biological sciences, shaping our understanding of biodiversity, evolution, and ecological interactions. Traditionally focused on taxonomy, anatomy, and behaviour, zoology has evolved significantly in response to technological advancements, environmental challenges, interdisciplinary collaborations and the field has expanded to incorporate modern advancements in genetics, bioinformatics, artificial intelligence (AI), and conservation. This Paper explores the critical role AI plays in advancing zoological research and conservation efforts. From species identification and population monitoring to behavioural analysis and habitat preservation, AI technologies such as machine learning, computer vision, and natural language processing are revolutionizing how zoologists understand and protect the animal kingdom. AI technology offers immense potential for animal scientists to improve their work. By analyzing vast datasets, automating labour-intensive tasks, and providing predictive insights, AI enhances the efficiency, accuracy, and scope of zoological studies*

Keywords: Artificial Intelligence (AI), Zoology, Biodiversity, Animal Science, Machine Learning

