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## WildGuard using AI: Defending Crops and Residential Area through Animal Monitoring

Mandlik Tanushree Navnath<sup>1</sup>, Wakchaure Ruchita Dipak<sup>2</sup>, Zanjad Akshata Bhanudas<sup>3</sup>, Zaware Pranjal Sunil<sup>4</sup>, Prof. S. B. Kawade<sup>5</sup>

Department of Electronics & Telecommunication Engineering<sup>1,2,3,4,5</sup> Amrutvahini College of Engineering, Sangamner, A. Nagar, Maharashtra

**Abstract:** WildGuard is a cutting-edge initiative harnessing machine learning and computer vision technologies to safeguard agricultural crops and residential areas from wildlife intrusion. Through a network of strategically positioned cameras in wildlife habitats, the system detects and monitors wild animals in real-time, providing early warnings to residents and enabling swift response from authorities to mitigate potential conflicts. By ensuring prompt identification of wildlife presence and facilitating proactive measures, WildGuard promotes coexistence and protects both human communities and endangered species, contributing significantly to wildlife conservation efforts.

**Keywords:** Wildlife conservation, technology, machine learning, human-wildlife conflict, habitat protection

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