

# Landslide Detection System using WSN

Chetan Kharkar<sup>1</sup>, Nitesh Pawar<sup>2</sup>, Shivaji Kosambe<sup>3</sup>, Prof. J. A. Desai<sup>4</sup>

Students, Department of Electronics and Telecommunication Engineering<sup>1,2,3</sup>

Professor, Department of Electronics and Telecommunication Engineering<sup>4</sup>

Sinhgad College of Engineering, Pune, India

**Abstract:** Landslides are one of the most devastating natural disasters that can cause loss of life and property damage. In recent years, advances in wireless sensor network (WSN) technology have enabled the development of cost-effective and efficient landslide detection systems. This paper provides a comprehensive review of the current state-of-the-art in landslide detection using WSNs. We discuss the various types of sensors used in WSNs for landslide detection, the data fusion techniques used to combine sensor data, and the algorithms used for landslide detection. We also highlight the challenges and future directions in this field.

**Keywords:** Landslide, Arduino, Wireless sensor network, soil, Sensor Development

## I. INTRODUCTION

Landslides are a significant natural hazard that can cause severe damage to infrastructure, property, and loss of human lives. Traditional landslide monitoring techniques involve the use of manual measurements and geotechnical instrumentation, which are expensive and time-consuming. In recent years, wireless sensor network (WSN) technology has emerged as a promising solution for landslide detection due to its cost-effectiveness, scalability, and real-time monitoring capabilities.

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