

# Rising Waters: A Machine Learning Approach to Flood Prediction

## 9.2 DISADVANTAGE:

### Dependence on Data Quality

The system's accuracy depends on the quality and availability of historical and real-time data. Incomplete or incorrect data can reduce prediction accuracy.

### Limited Prediction Accuracy

Machine learning models cannot guarantee 100% accurate predictions. Unexpected natural events may affect results.

### Requires Continuous Data Updates

To maintain accuracy, the model must be retrained regularly with updated environmental data.

### Infrastructure Dependency

The system requires internet connectivity, server availability, and proper deployment infrastructure for smooth operation.

### High Initial Development Effort

Developing, training, and testing machine learning models requires technical expertise and time.

### Cannot Replace Human Expertise Completely

The system supports decision-making but cannot fully replace meteorologists and disaster management experts.

### Risk of False Alerts

Incorrect predictions may cause:

- False positives (unnecessary panic)
- False negatives (missed warnings)