

# **FLOOD MONITORING AND EARLY WARNING**

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## **Abstract**

Flood are natural disaster characterized by the overflow of water onto normally dry land causing widespread inundation.They can triggered by various factors,including heavy rainfall,snowmelt,dam failures,rapid ice melting and storm surges.It have severe consequences including damage to homes,infrastructure,and agricultureland. Every year,death rate is increasing because of there no early warning.To overcome this problem we have an idea and implementation of Flood monitoring and Early warning by using Internet of things(IOT).Flood monitoring systems use various sensors and data sources to continuously gather information about rainfall,river water level,soil moisture and weather condition.Flood.They transmit it wirelessly to a central data hub.IoT allows for real time collection and transmission of data from these sensors.IoT flood monitoring systems use advanced data analytics and machine learning algorithms to process the incoming data.When the system detects conditions indicative of an impending flood,it triggers automated early warnings.The warnings can be sent to varioys communication channels,including mobile apps,text messages,emails and even automated phone calls.IoT enabled systems allows authorities and emergency responders to access data remotely.IoT systems can integrate with other data sources,such as weather forecasts and satellite imagery, to enhance flood prediction accuracy.IoT technology often requires lower maintenance costs compared to traditional monitoring methods,as it eliminates the need for manual data collection and reduces human intervention.IoT driven flood monitoring and early warning systems are powerful tool in disaster risk reduction,as they provide more precise and timely information to both authorities and the public.