

The new system uses Twitter, AI to forecast floods

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Urban flooding is difficult to monitor due to the complexity of data collection and processing. This prevents detailed risk analysis, flood control, and validation of standard warning number models. Researchers have tried to solve this problem by discovering how the latest AI technology can be used to analyze data from social media and applications for data. user provided.



They discovered that social media can be used to supplement data sets based on remote sensing reports and witnesses. Applying these methods in case studies, they have found a way to provide real information and AI can play an important role in flood warning and warning systems.

"Sea levels have risen at an average rate of 3.4 mm / year over the past decade. Today's maximum extremes will become the average of the future, so coastal cities and nations must act to protect their land , " Wang said. "We are particularly interested in the rise of what we call sunny day floods - floods that occur in the absence of any extreme weather events, but due to the high average sea level. more suddenly ' .

He said: *"We find that large data-based flood monitoring approaches can certainly complement existing data collection facilities and show great promise for improved monitoring. observation and warning in the future " .*

Data on Twitter has been streamed online for a period of one month in 2015, with keywords filtering 'flood', 'flooding', 'beating', 'dykes' quite popular. Over 7,500 copies of relevant information were analyzed during this time. MyCoast is a system used by several environmental agencies to collect "community science" data about various coastal hazards or incidents.

The system contains more than 6,000 flood photos, all collected via mobile application. Information extracted from AI tools has been validated for precipitation data.

In addition, researchers believe that a tool like Twitter will be more useful for large-scale and inexpensive monitoring, while the collected data provided will be richer and include Personal reporting information at the micro level.

The researchers said these tools could be used to track water intrusion and flooding in the city. This can be used to improve forecast models and early warning systems to help people and authorities prepare for an upcoming flood.

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