

STAVING AHEAD OF THE STORM HURBLAGE ALLE OF THE STORM HUBBLAGE ALLE OF THE STORM HU

Tailored Guidance

When a hurricane looms, people across a wide area wonder what impacts they will experience. They ask questions like: Is it safe to stay in their house? Will my family need to evacuate? When will the winds arrive? How high will the winds get? How long will the power be out? Will my house endure the storm? Without any specific information, these questions can be pretty overwhelming.

The HurricaneRiskCalculator® web app provides a localized and personalized assessment of the predicted hurricane winds and translates this information such that people can make informed decisions about preparation and evacuation. This project hosts a cloud-based data and content delivery infrastructure that is capable of supporting a wide range of mobile apps.

CLARITY WHEN IT COUNTS

HurricaneRiskCalculator[®] uses a probabilistic prediction framework to provide location-specific predictions for the hurricane wind hazard, including the full probabilistic distribution of wind speed, the probabilities that winds will exceed key thresholds (e.g., Tropical Storm and Category 1, 2, 3, 4, and 5 wind levels), the timing of the arrival and departure

Benefits & Impacts

- Personalized information on hurricane winds by address
- Users can monitor predicted winds for up to ten locations
- Clear choices for informed decisions
- Cost-effective cloud-based delivery

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of the winds, and the expected duration of winds. Information is presented clearly using research-driven best practices, using plain language combined with sensical probabilities, tables, and graphs.



Currently in English and Spanish, the app is structured to easily add additional languages

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Select property from list Hartsfield-Jackson Atlanta International Airport (*					Select property from Is Cedar Key, FL	d.	•	
łUł	RRICANE HELENE (AL09) Wind Hazard at Ha	ELENE (AL.00) Wind Hazard at Hantsfeld Jackson Atlanta International Argon (Atlanta, GA) HELENE - 2024 Step 23 112 Ritz metes tion Hantlewis Jackson Atlantar a tremonional Argon (Atlanta, GA) Histo Anamare View			POTENTIAL TROPICAL CYCLONE NINE (AL69) Wind Hazari at Cobar Koy, FL NINE - 2023 Sup 23 Toz 718 India fam Cater Kay, FL Hild Indunan View			
	Wind Hazard: Maximum Winds				Wind Hazard: Maximum Winds			
	Description	Wind Speed	Probability		Description	Wind Opend	Probability	
	Tropical Storm	35+ mph	12%		Tropical Storm	39+ mph	62%	
	Gale	58+ mph	95		Gale	50+ mph	62%	
	Category 1 Hurricane	74+ mph	6%		Category 1 Humicane	74+ mph	42%	
	Category 2 Hurricane	96+ mph	2.0%		Category 2 Hurricane	90- mph	24%	
	Category 3 Hurricane	111+ mph	15		Category 3 Humicane	111- mph	15%	
	Category 4 Hurricane	130+ mph	0.1%		Category 4 Humicene	130+ mph	9%	
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PARTNER WITH US

The project uses an ultra-efficient serverless cloud-based architecture that enables cost-effective content delivery for pennies per user per year. Implemented with an API, the platform can support a wide variety of consumer-facing mobile apps for insurance companies, emergency management, and

weather apps. We invite partnerships with industry to test, optimize, and customize these capabilities for mobile apps.

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