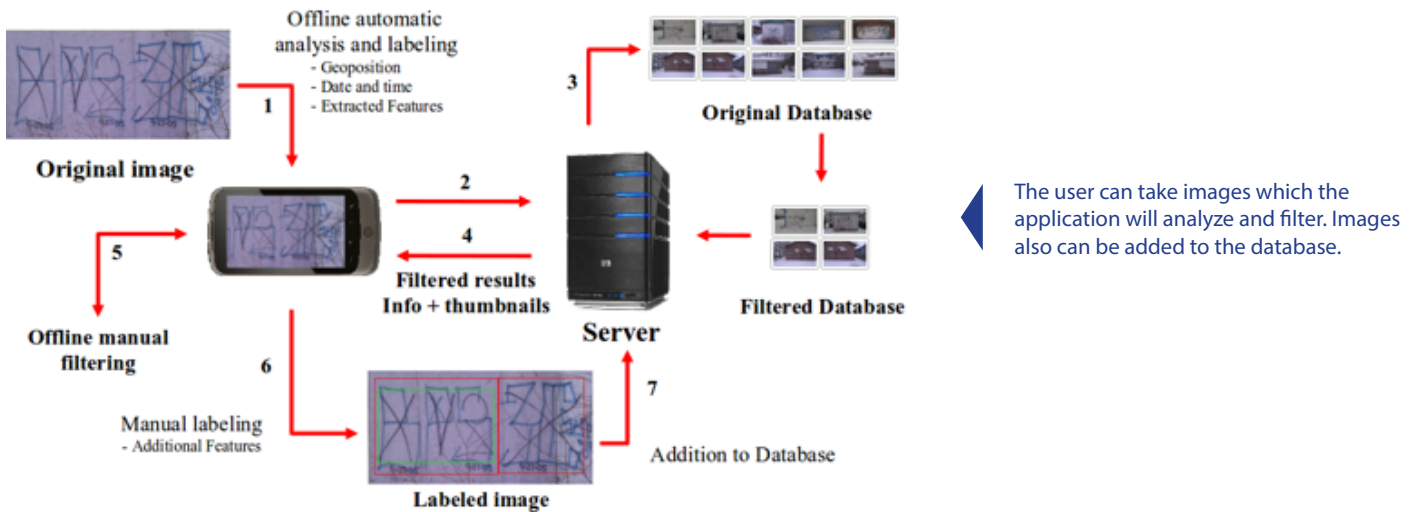


GARI (Gang Graffiti Automatic Recognition and Interpretation) PRODUCT

What GARI Does

GARI, which stands for Gang Graffiti Automatic Recognition and Interpretation, is a mobile application and cloud-based system that allows law enforcement and criminal justice personnel to capture, input, and search images of gang graffiti and tattoos using an Android or iOS (iPhone) device.

The images are analyzed, stored and indexed by time, location (GPS coordinates) and content. Users can browse images up to a 20-mile radius of their current location as well as search the database for similar images.



How it Works

The image analysis includes obtaining the user's geolocation, date and time, and extracting relevant features (e.g., color, shape) from the gang graffiti image. The information is sent to a cloud-based server and compared against the graffiti image database. The matched results are sent back to the device where the user then can review the results and provide extra inputs to refine information. Once the graffiti is completely decoded and interpreted, it is labeled and added to the database.

Why it is Useful

In many communities, criminal gangs commit as much as 80% of the crime, according to law enforcement officials throughout the nation. Street gangs most commonly communicate through graffiti — including challenges, warnings or intimidation to rival gangs. Through GARI, officials can track gang affiliation and growth or even obtain membership information.

GARI also helps users determine when a new gang moves into an area and identify what gangs are active in an area. From that information, the tool can assist in predicting potential outbreaks of gang violence. GARI also can assist users in connecting with youth at risk of gang recruitment.

continued...

Used By

- Indianapolis Metropolitan Police
- Indiana Intelligence Fusion Center Gang Task Force
- INGangNetwork
- Cook County Sheriff's Department
- Illinois State Police
- Navajo Nation
- Approximately 400 additional law enforcement entities have expressed interest

Awards

Second place in the 2015 Tatt Challenge, sponsored by the National Institute of Standards and Technology (NIST) and the Federal Bureau of Investigation (FBI).

Use for Citizens

A community version is available that functions in the same way, but only allows the user to report graffiti and does not make any information visible to the individual uploading and reporting the graffiti image.

Contact Us

Want to find out how VACCINE's research can help your organization? Email vaccine@purdue.edu or visit www.visualanalytics-CCI.org.

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