



**Sam Houston State University**

## AVAILABLE TECHNOLOGIES

### **Title: Web-Based Information System for Small Law Enforcement Agencies**

**Background:** CRIMES was launched as a direct technical assistance endeavor to Texas Law enforcement, consistent with the Criminal Justice Center's Legislative Mandate. The endeavor was undertaken to serve as a National Law Enforcement Technology Demonstration, to demonstrate integrating emerging technology with Police Strategy. The current system is too expensive for small agencies serving populations of 10,000 or less.

**Invention Description:** Three information system capability developments opens opportunity to offer an internet version of Crimes (see Crimes description) The enabling technologies include ubiquitous high speed internet connectivity, the recent availability of secure virtual private network ability at reasonable cost, and virtually unlimited server storage capacity. A web-based version entails maintain a central server for all data storage and manipulation. A subscribing law enforcement agency would have on-site a workstation with a browser lined to the server by a high speed internet connection.

### **Benefits:**

- Low cost of operation
- Critical access to information sharing systems- better informed law enforcement
- Provide access to State and National data bases including TDEx, NDEx,

**Market Potential/ Applications:** Currently CRIMES is serving over 50 Law enforcement agencies representing populations ranging from 10,000 to 400,000. Operating in a research mode CRIMES generates over 1 million a year from annual license fees. Potential exists for rapid expansion in the United States, and potential for law enforcement agencies worldwide. There are over 1 thousand municipal departments, sheriff's and constable offices in Texas serving populations less than 10,000- all potential clients.

**IP Status:** Copyright Sam Houston State University. Patentability review pending.  
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**Sam Houston State University**

## AVAILABLE TECHNOLOGIES

### **Title: Criminal Research Information Management and Evaluation System**

**Background:** CRIMES was launched as a direct technical assistance endeavor to Texas Law enforcement, consistent with the Criminal Justice Center's Legislative Mandate. The endeavor was undertaken to serve as a National Law Enforcement Technology Demonstration, to demonstrate integrating emerging technology with Police Strategy.

**Invention Description:** CRIMES is a state-of-the-art comprehensive computerized police information management system. It is designed to serve as a complete information management system for law enforcement agencies. The current system integrates modules related incidents (offense reports), computer-assisted dispatch, mobile communication interface, automated crime and incident reporting, arrest, booking, property room management, jail management, traffic activity, crime analysis, and operational analysis. All modules are linked to allow universal search, and data transfer.

### **Benefits:**

- Designed in client – server format utilizing Microsoft Windows Operating System and components of Microsoft Office for ease of installation, compatibility with existing hardware/software, and low cost of operation
- Modules designed over 15 years with input from multiple agencies

**Market Potential/ Applications:** Currently serving over 50 Law enforcement agencies representing populations ranging from 10,000 to 400,000. Operating in a research mode generates over 1 million a year in from annual license fees. Potential for rapid expansion in the United States, and potential for law enforcement agencies worldwide.

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## AVAILABLE TECHNOLOGIES

### **Title: Steganalysis with Neighboring Joint Density**

**Background:** Steganography aims to enable covert communication by embedding data into digital files and making the hidden message invisible. The Potential for exploiting steganography for covert dissemination is great creating a heightened need to realize effective countermeasure for steganography.

**Invention Description:** Systems and methods for detecting hidden messages and information in digital files. A method of detecting steganography in a compressed digital image including extracting neighboring joint density features from the image under scrutiny. Steganography in the image may be detected based on differences in a neighboring joint density feature of the image and the shift versions.

### **Benefits:**

- Improved method of detecting several JPEG-based steganographic systems
- The technologies are also very effective to detect other image manipulations including tampering identification, as well as exposing the image manipulation history

**Market Potential/ Applications:** In addition to law enforcement agencies, the technologies could be used for different businesses including but not limited to google, youtube, adobe, facebook, yahoo and multimedia security related companies/research communities.

**IP Status:** Patent Pending U.S, Provisional application 61/593,752

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