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Biometrics over a Wide Area Network (WAN)

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Motivation

- To provide members of the Tippecanoe Sheriff's Department a more accurate way to record the time and attendance of employees.
- To answer the needs of law enforcement through applied research in academia.

Goals



Current Time and Attendance System

Proximity ID card system

Proposed Time and Attendance System

Hand Geometry

Environment

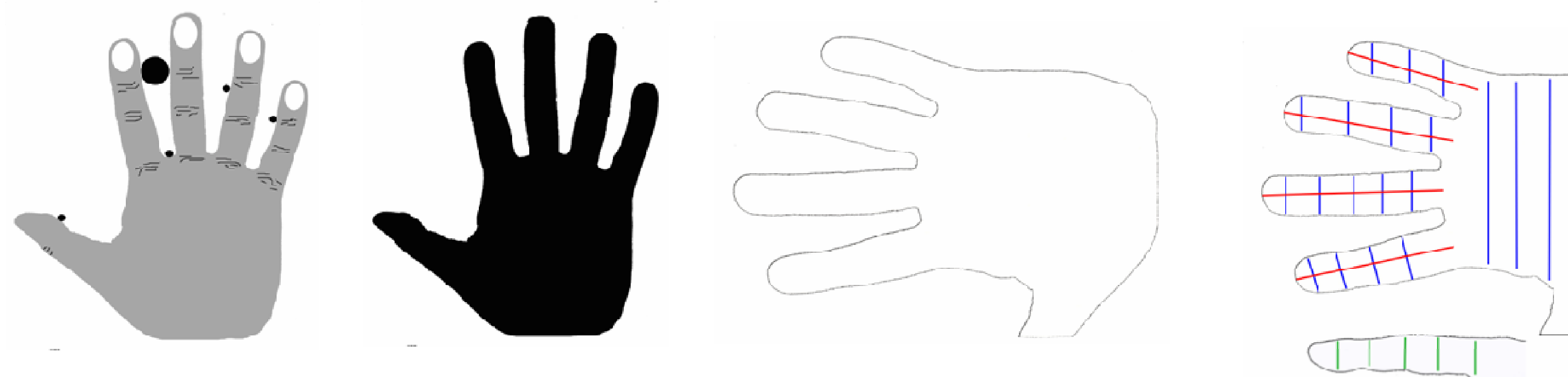
- Each reader was placed in a remote location.
- Network communication through a Virtual Private Network (VPN).
- Centralized HandNet user database.

Hand Geometry

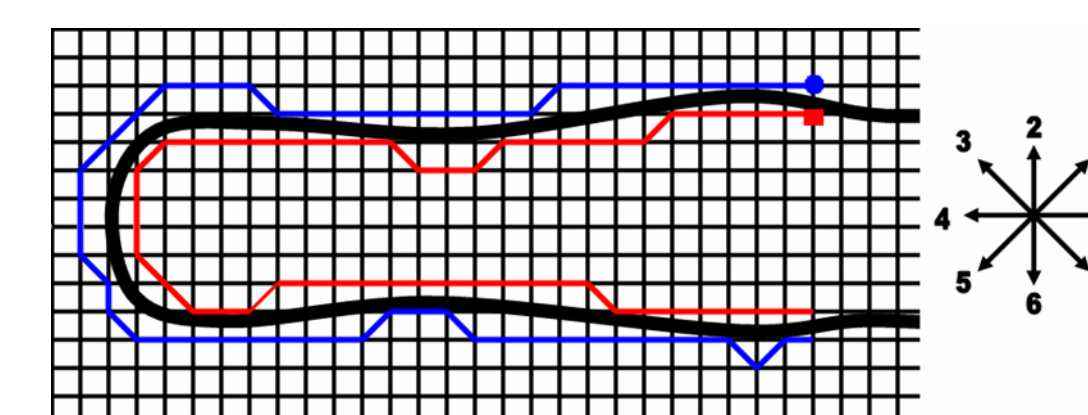
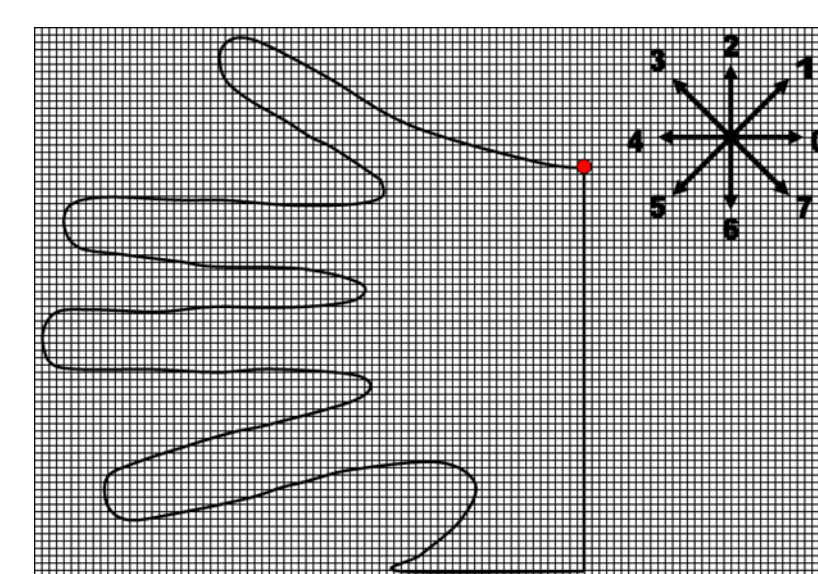
Image Acquisition



Feature Extraction



Freeman Chain Code



Results

- Cost of replacing cards was eliminated.
- Time was saved entering and leaving work.
- "Buddy punching" threat was eliminated.

