Building Safe and Secure Communities through Real-Time Edge Video Analytics

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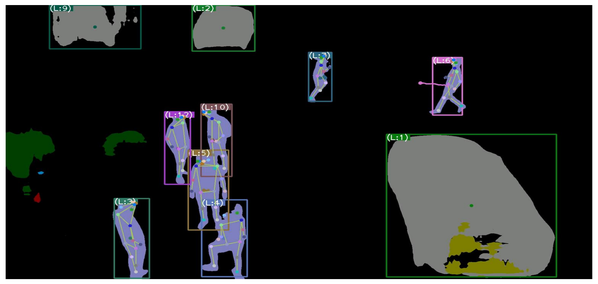
Problem Statement

- Bringing recent advances in Artificial Intelligence to address public safety concerns in our communities while considering privacy and transparency.



Immediate Impact on Society

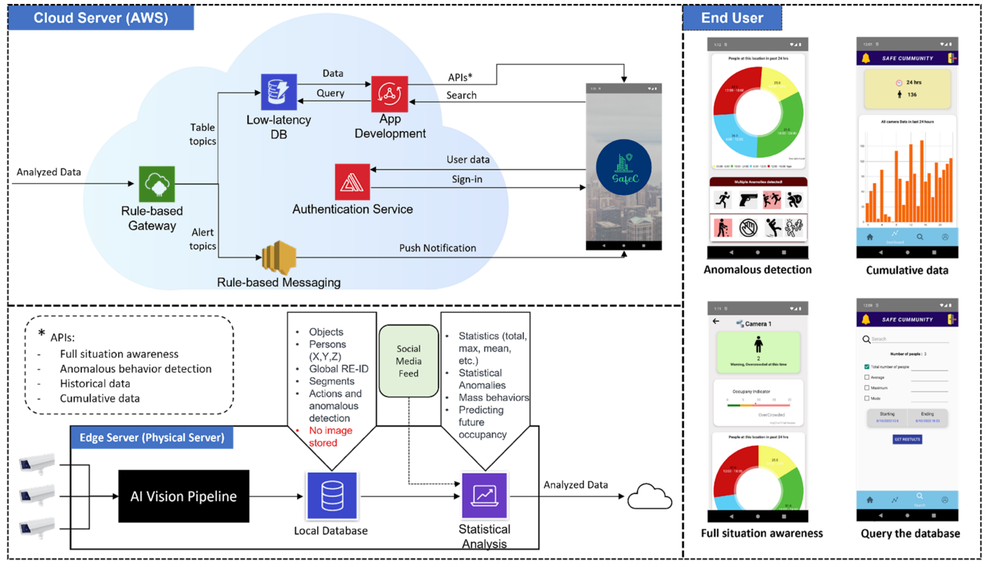
- Real-time awareness of community issues such as, crime, social disorder, and personal and public safety.

Broader Impact on Community

- Adopting the technology in broader contexts results in reduce crime, fewer unnecessary police-citizen interactions, and minimize tensions between law enforcement and communities.

Intellectual Merits

- Offers a network of smart cameras trained to identify suspicious or abnormal behaviors, immediate safety concerns, and environmental hazards.
- Developed a full end-to-end privacy-preserving IoT cloud infrastructure as the standard model to deploy smartphone application.

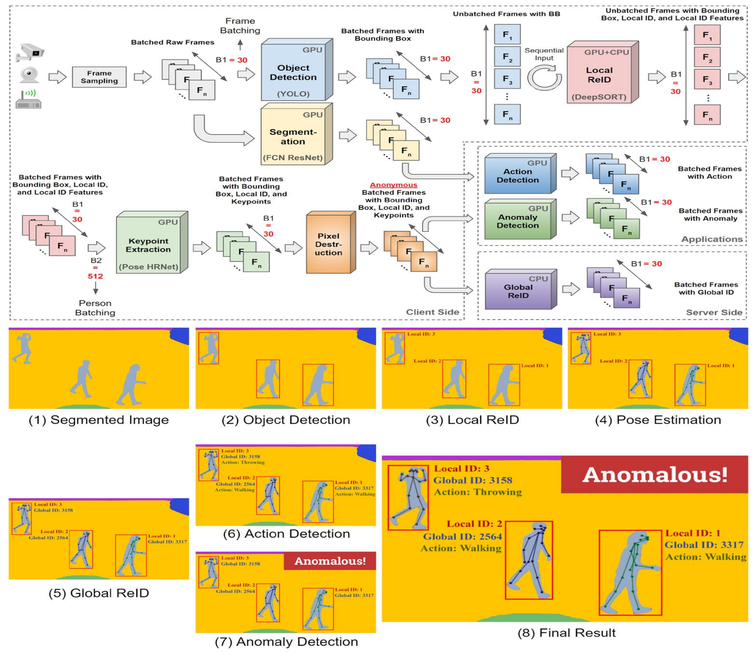


Project Activity

- Privacy-preserving video analytics with full situational awareness
- Creating the Charlotte Anomaly Dataset (CHAD)

1. Developing smartphone app with full interaction with AI video analytic

- Established a fully functional testbed at CPCC, with more than 20 cameras.



Next Steps

- Extension of testbed to Charlotte uptown
- Growth through the Sam Houston State University partnership to demonstrate viability and scalability in new contexts
- Improvement of AI algorithms
- Enhancement of system resiliency
- Extend community engagement

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