Distributed Edge Computing for Smart Cameras.

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nemps
Novos Media e Sistemas Ubíquos
New Media and Pervasive Systems

Motivation

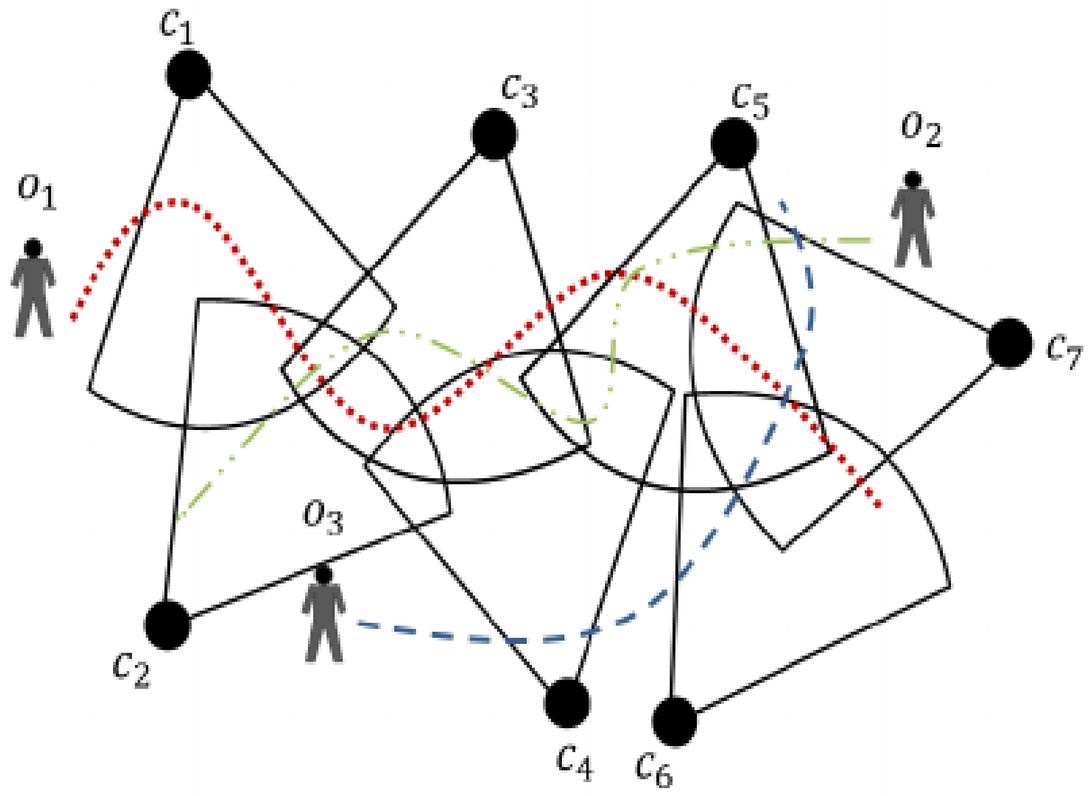
- At present, distributed smart cameras perform visual tracking, and frames transported to cloud or centralized servers for processing.
- This causes delay in computation and immediate feedback for time sensitive scenarios such as video streaming for security alerts in crowd monitoring.
- Implementation of Edge computing which supports distribution of computing resources at the network edge, will help mitigate these inefficiencies.

Challenges

- Localize computational effort by using edge computing.
- Reduce deployment, management and operational cost by using distributed self managed systems.
- Reduce time required to process captured video frames from the distributed cameras.

Objectives

- **Reduce communication latencies as opereations are executed closer to the end devices.**
- **Create opportunities for real time servicing of critical service.**
- **Decentralised infrastructure to end devices.**
- **Better services as devices are expected to cooperate with each other to get better information.**



Status

- **NEMPS**- PhD Thesis proposal stage
- **COPELABS**- Work done within projects of SITI research group.

copelabs
Cognition and People centric Computing Labs

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