# Evolutionary Cloud for Cooperative UAV Coordination

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UF Informatique

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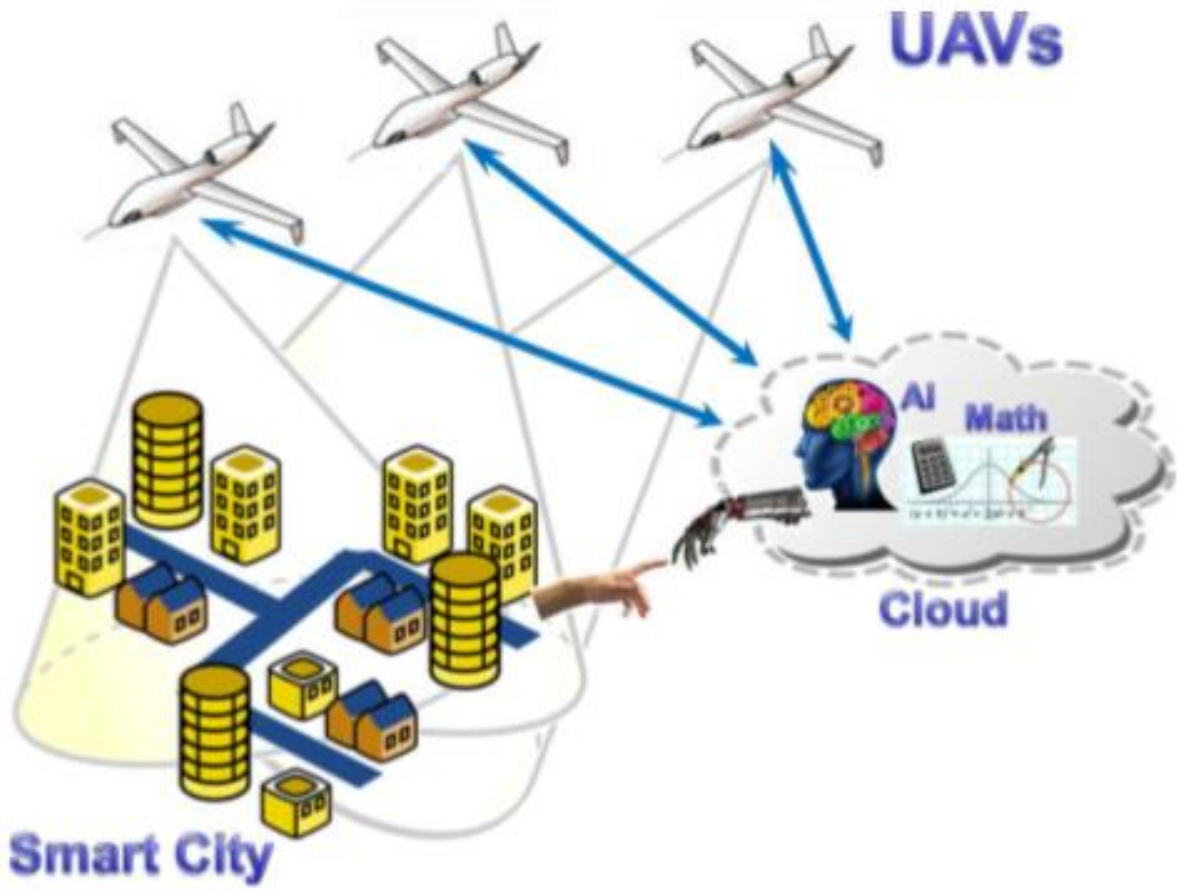
# The domain

- UAVs : Unmaned Aerial Vehicles
- Cloud Computing : network of servers hosted on the internet to store, manage and process data
- Smart cities : urban area using sensors to gather data

# The subject



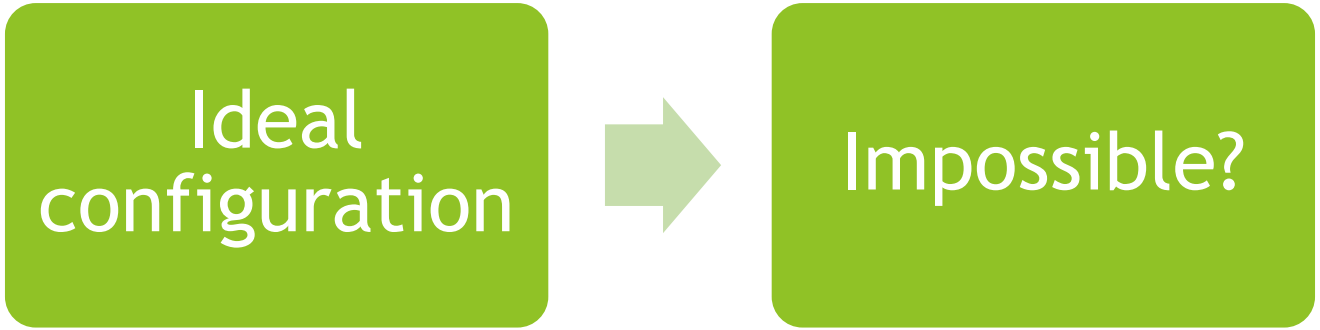
# State of the art

- Some studies
- No cooperation between the UAVs
- Smart cities not really developed
- No links between the three components

# Scientific content abstract

1. Optimization problem
2. The usefulness of Cloud Computing
3. Semantic agents
4. A Big Data problem

# Scientific content
## Optimization problem




- Optimization:
  - Flying routes
  - Communication environment

# Scientific content
## The usefulness of Cloud Computing

- Rapid scalability
- High security and privacy
- Strong support for fail-over and content replication

- Centralized strategy
- Distributed strategy
- Market-based approach

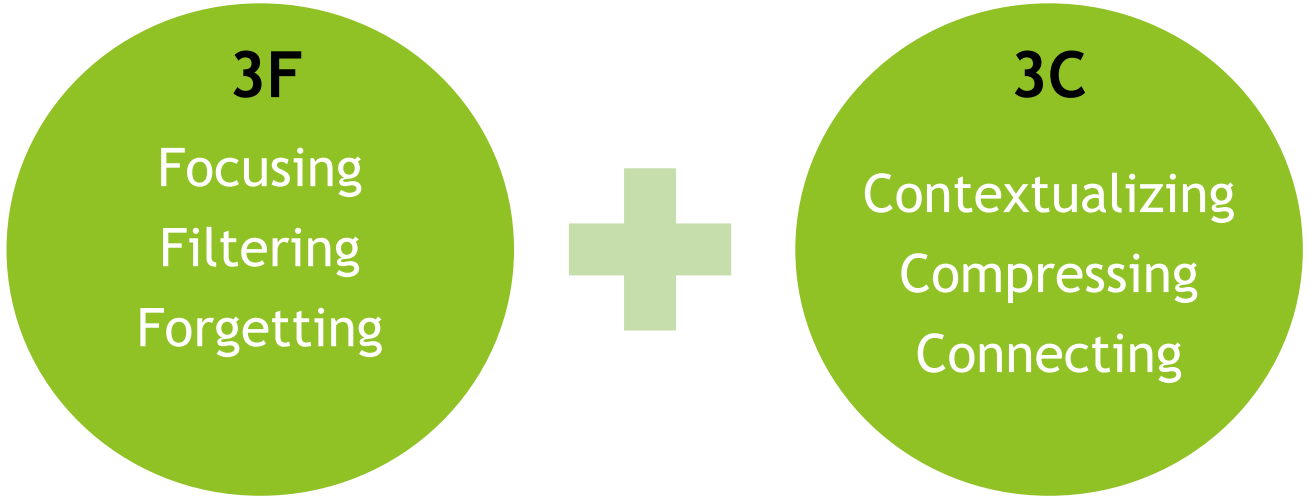
} Hybrid solution

# Scientific content
## Semantic agents

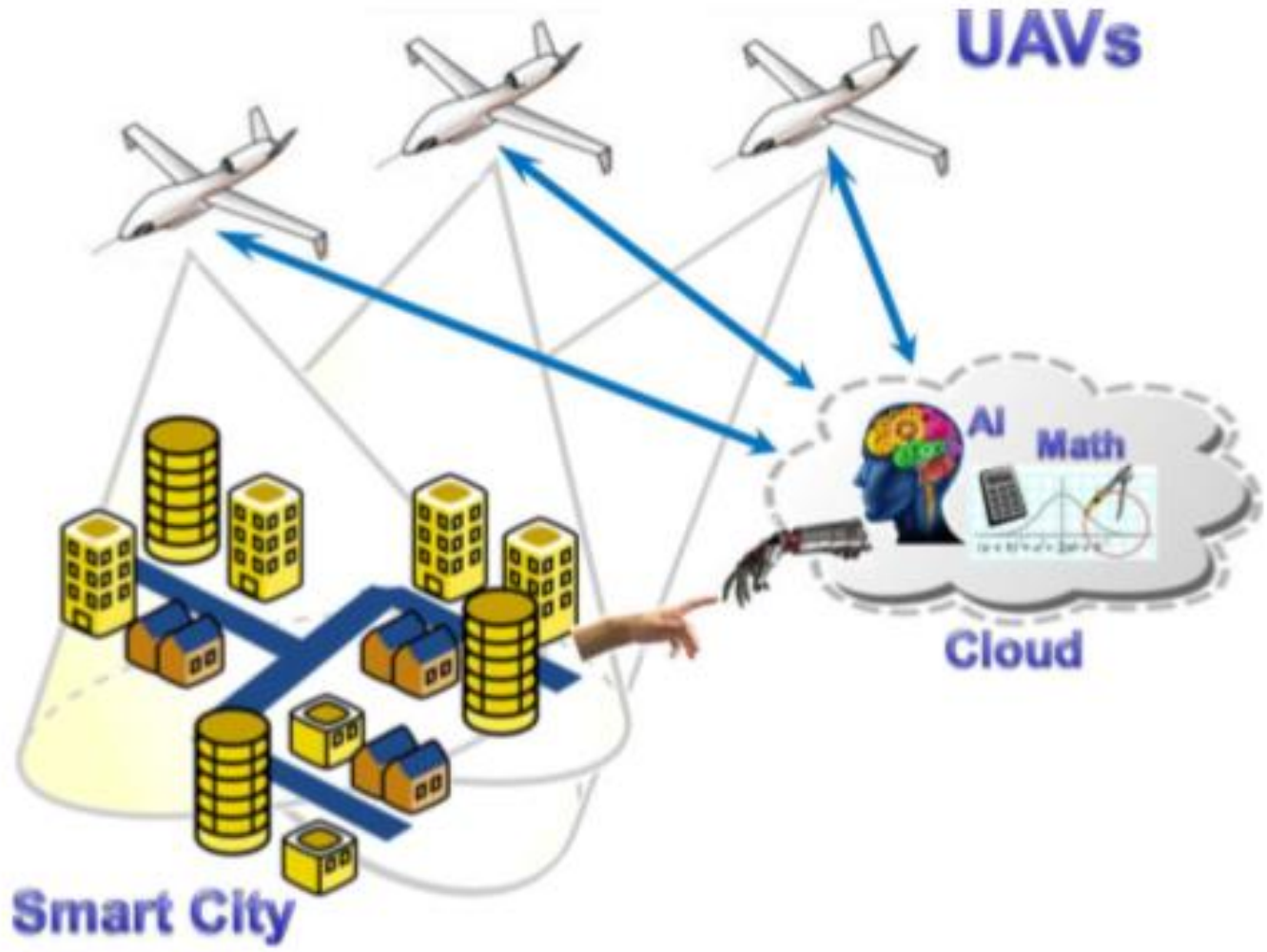
- Smart resources → Agents → Communication
- Open World assumption
- Multi-agents system
- Mobile agents

# Scientific content
## A Big Data problem

- Big Semantic Data Problem
- Efficiency, utility, effort



# Conclusion



# Objectivity about the report

- Many ideas
- Many references
- Example : forest fire + flood

- Nothing concrete
- No code, algorithms, formulas…
- Too abstract

Clear future researches

# Thank you for listening. Any question?