

Emergency Response Multi-Agent System

Design Presentation

Team Name

October 31, 2024

Outline

- 1 Introduction
- 2 City Selection
- 3 Environment
- 4 Agent Crews
 - Emergency Services
 - Medical Services
 - Firefighters
 - Public Communications
 - Forensics Team

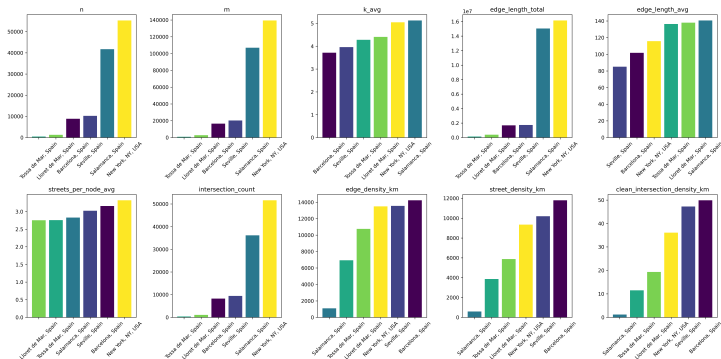
Introduction

- Multi-agent system for fire-related emergencies in Lloret de Mar
- Five specialized response teams using CrewAI:
 - Emergency services
 - Medical services
 - Firefighters
 - Public communications
 - Forensics team

City Selection

- Selection criteria
- Candidate cities
- Evaluation metrics
- Final selection: Lloret de Mar

Map Analysis



Environment Properties

- Accessibility: Partially Observable
- Determinism: Non-deterministic
- Episodicity: Non-episodic
- Dynamics: Dynamic
- Continuity: Continuous

Agent Crews Overview

Five specialized teams:

- 1 Emergency Services
- 2 Medical Services
- 3 Firefighters
- 4 Public Communications
- 5 Forensics Team

Emergency Services

- Emergency Call Agent
 - Main task: Receive and assess calls
 - Type: Interface agent
- Notification Agent
 - Main task: Relay information
 - Type: Facilitator agent

Medical Services

- Medical Services Operator
- Hospital Coordinator
- Paramedic Teams

Firefighters

- Fire Chief
- Equipment Technician
- Fire Combatant

Public Communications

- Facilitator Agent
- Information Agent
- Article Writer
- Mayor
- Social Media Commentator

Forensics Team

- Investigates causes and origins of fires
- Collects and analyzes evidence
- Documents findings for future prevention
- Collaborates with other emergency teams

References

- Key references from bibliography