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SUBJECT OF FREE CHOICE
SOLDADOSS
AI in Aviation Engineering



Overview

- OUR TEAM
- INTRODUCTION
- CODE
- WEBSITE
- CONCLUSION

01

02

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04

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OUR TEAM



Nathan

Project Manager



Erwann

Technical Developer



Enzo

Data Analyst

OUR ROLES



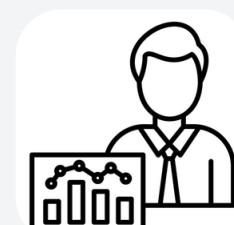
Project Manager

plans tasks, manages deadlines, coordinates the team, writes the introduction and organises the portfolio/README



Technical Developer

writes code, builds models, runs experiments, explains the code and its purpose



Data analyst

collects, cleans, analyses data, creates graphs, writes the conclusion and organises the portfolio/README



Introduction

Task: create a system that uses AI
in our code and that answers to a
current problematic



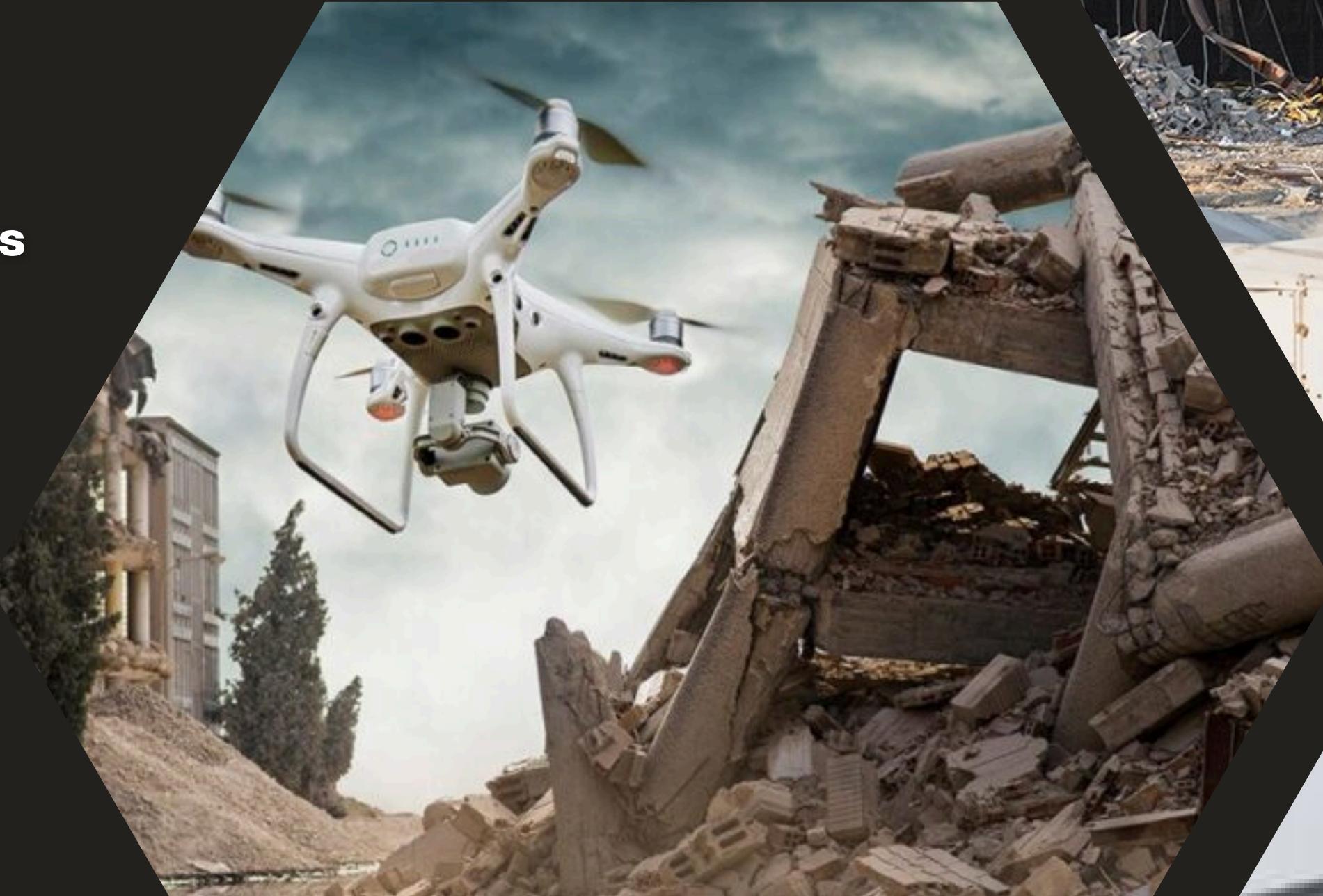
Our Project

SOLDADOSS:

A drone that will save lives using AI in order to access complicated places.

Places where we would use this drone:

- natural disasters
(Tsunamis, Earthquakes, Floods,...)
- human disasters
(Fires, Wars/armed conflicts,...)





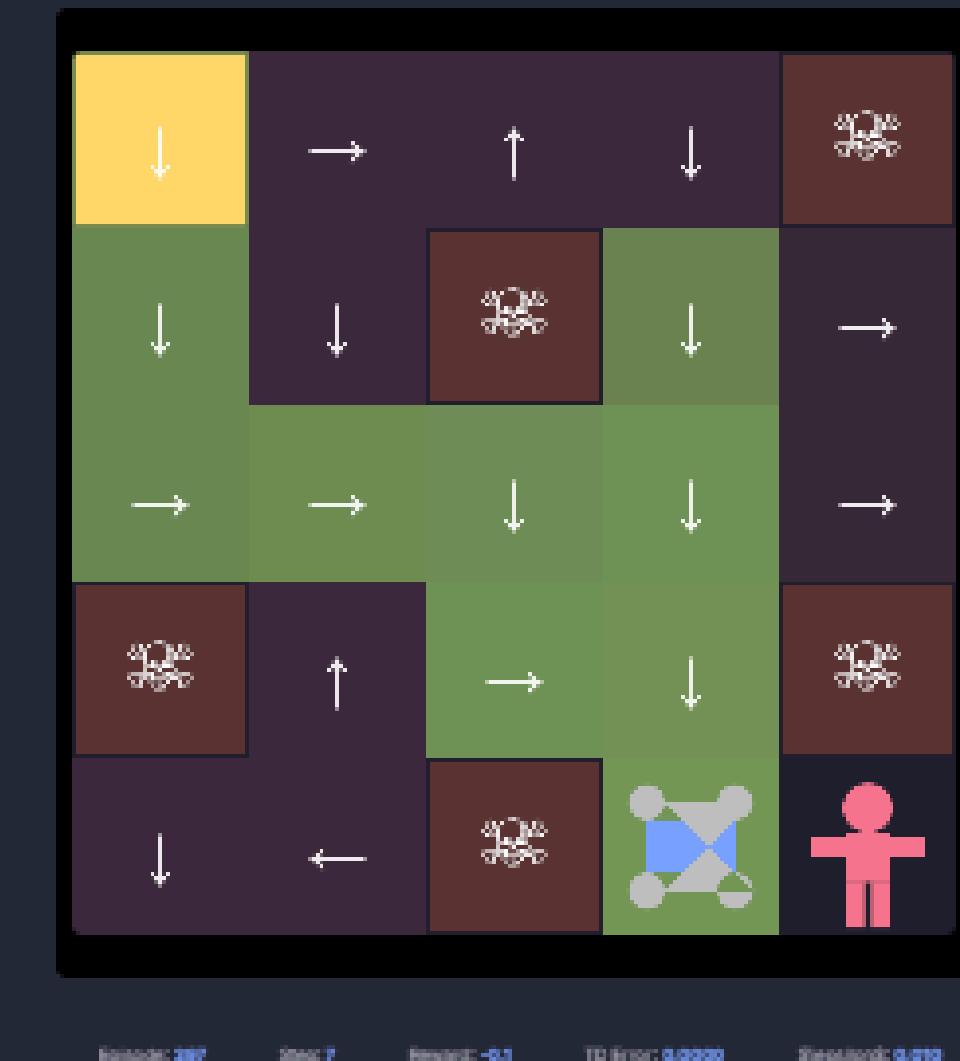
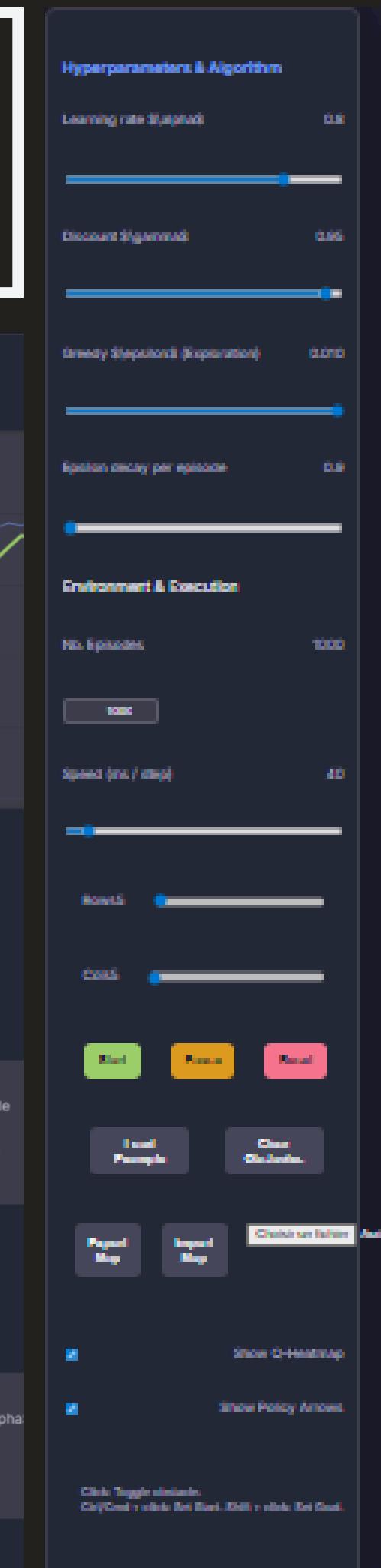
Code

Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce ut convallis nisi, at consequat turpis. In bibendum efficitur imperdiet. Fusce eu vestibulum augue, ac iaculis quam.

Integer placerat tincidunt enim scelerisque egestas.
Nullam tempor lorem enim, eu tincidunt justo congue.

Gallery



Conclusion

- AI improves over time → faster, safer
- Adapts to many or single victims
- Cost-effective: cheaper than helicopters
- Life-saving with thermal/infrared sensors





Recommendations

- Autonomous navigation using Reinforcement Learning
- Better sensors: infrared, thermal, ultrasonic
- Physical prototype for real-life tests
- GPS-free communication
- Advanced vision: movement, gestures, vital signs

Reflection & Impact

- AI has real-world potential and limits
- Reinforcement Learning makes drones safer and faster
- Cost-efficient: deploy multiple drones instead of one helicopter
- SOLDADOSS could become a life-saving tool



SOLDADOSS

<https://github.com/erwann74800-cmd/SOLDADOSS/tree/main>