

IGNIS Platform for Wildfire Simulation and Prevention

Wildfires represent an environmental and safety issue, with profound consequences for the environment, communities, and the economy. Most of these incidents could be prevented or mitigated through various measures, but there are no tools that enable intelligent coordination and decision-making among the involved entities. To address all this, the GILAB team at the University of Girona has developed the IGNIS platform, using real data from the Mediterranean region to simulate wildfires in a custom way and to elaborate more effective firewall systems.

COMPETITIVE ADVANTAGE

- Customisation and optimisation of parameters according to specific needs
- Modular platform
- More realistic visualisation
- Greater response capacity and pre-planning
- Increased safety and efficiency in fire extinguishing processes

OBJECTIVE MARKET

- Public administrations and forest management agencies
- Training institutions and environmental education facilities
- Forestry service companies and land management consultancies
- Organisations focused on civil protection and urban planning in risk areas

POTENTIAL APPLICATIONS

- Fire prevention and fire suppression
- Land management and wildfire break planning
- Emergency services training
- Educational simulation and public awareness

ROADMAP / TIME-TO-MARKET

- DXC Award for the Best Final Degree Project of GEINF (Chair in Information and Computing, 2024)
- The researchers are interested in creating a company based in their research.

RESEARCH GROUP:

GILAB (Research Group in Graphics and Imaging Laboratory)

University of Girona

TRL - 3

CONTACT

Unitat d'Innovació i Transferència de l'RDl

Oficina Tècnica de Recerca i Transferència (OTRiT)

UdG

transferencia@udg.edu

+34 972 41 81 47