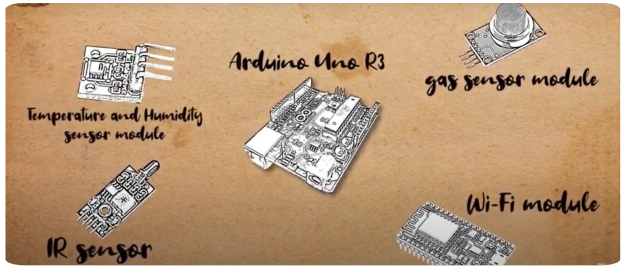
DetectIT | Save our forests



DecectIT is forest fire detection device which detects fire by using different sensors and sends nottification to the application.

Fires in the Republic of Croatia are a big problem for forests, given that fire brigades have about 3.000 interventions per year. Average burned area per year is 14.278 ha of forest land. DetectIT provides information of the current situation in the forest area (level of temperature, humidity, carbon monoxide). Device secures fast information about the occurrence of a fire and provides all important data. Devices are located 100-300 meters away in the forest area and communicate with each other via radio waves. Communication between devices can reach even several kilometers so it is possible to cover very large area. Each device has one or more sensors. When the device receives an icreased concentration of flammable gas or smoke, it sends a signal to the other device about occurrence of a fire.

Currently, for sending notification about occurrence of fire, device uses 4G network. In the future for notification sending, it is planned to use the 5G network which can send notification in a shorter time period. Also, it is planed to spread the use of device i.e. setting device in households. Prototype of device is installed and tested on the forest area. Device is developed by high school students of Gymnasium Velika Gorica, Croatia. Group of students signed up on international competition and won 2nd place.

DETAILS

ORIGIN OF WOOD

--

TYPE OF WOOD

--

KIND OF WOOD CONCERNED

--

IMPACT ON ENVIRONMENT & BIODIVERSITY

--

INCOME EFFECT

--

EXPLOITATION POTENTIAL

--

HUB

South-East Hub

ECONOMIC IMPACT

--

SPECIFIC KNOWLEDGE NEEDED

--

MOBILIZATION POTENTIAL

--

SUSTAINABILITY POTENTIAL - VALUE

Very Positive

EASE OF IMPLEMENTATION

--

EASE OF IMPLEMENTATION - EVALUATION

Easy

KEY PREREQUISITES

--

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

Study visit (T2.3)

JOB EFFECT

--

COSTS OF IMPLEMENTATION (EURO - €)

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MORE DETAILS

CHALLENGE ADDRESSED

1.- Improve forest resilience and adaption to climate change

DOMAIN

Forest management, ecosystem, resilience

TYPE OF SOLUTION

Sensors, measurement equipment

KEYWORDS

Fire detection

sensors

automatic messaging.

DIGITAL SOLUTION

Yes

INNOVATION

Yes

COUNTRY OF ORIGIN

Croatia

SCALE OF APPLICATION

Regional/sub-national

START AND END YEAR

2019 -

CONTACT DATA

OWNER OR AUTHOR

Gymnasium Velika Gorica

http://gimnazija-velika-gorica.skole.hr/

REPORTER

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REFERENCES AND RESOURCES

MAIN WEBSITE

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PROJECT WEBSITE

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PROJECT REFERENCE

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RESOURCES

Application view

LOGO OF BEST PRACTICE

LOGO OF MAIN ORGANIZATION

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

POST DATE

13 Sep 2021

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Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY