AJA | Environmental sensors for real-time forest ecosystem monitoring

Forest health solution built upon an innovative sensor technology for real-time ecosystem monitoring

The startup foldAI has developed sensors to screen health status of forests providing forest managers with a rich understanding of their forest ecosystems, and a decision toolbox to deploy immediate mitigating actions. The team's solution, Aja, used in the sensors is a framework for ecosystem management based on deep technology. By harnessing state-of-art Machine Learning on precise, real-time sensor data, Aja can not only detect forest threats as they happen, but even predict their arising and forecast their unfolding. Aja improves forest health, resilience and bioeconomical performance by introducing lean processes to a broad ecosystem management community. It helps reducing greenhouse emissions by scaling high resolution forest management through a fully automated and affordable solution for more than 30 Million forest owners in Europe, Russia and North America. The solution builds on embedded Machine Learning, and biochemical and environmental signal processing on high-dimensional data. Use cases comprise the assessment of environmental impacts enabling greater accuracy in the evaluation of the environmental consequences of a strategy or policy, risks assessment including alerts to threats, biodiversity quantification and ecosystem health tracking. Aja's significant carbon reduction impact has been independently certified by The Climate Impact Forecast.

DETAILS

ORIGIN OF WOOD

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TYPE OF WOOD

--

KIND OF WOOD CONCERNED

--

IMPACT ON ENVIRONMENT & BIODIVERSITY

The solution helps to monitor ecosystem functions of forests and biodiversity, thereby improving risk management

INCOME EFFECT

--

EXPLOITATION POTENTIAL

--

HUB

--

ECONOMIC IMPACT

--

SPECIFIC KNOWLEDGE NEEDED

--

MOBILIZATION POTENTIAL

--

SUSTAINABILITY POTENTIAL - VALUE

Very Positive

EASE OF IMPLEMENTATION

--

EASE OF IMPLEMENTATION - EVALUATION

--

KEY PREREQUISITES

--

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

--

JOB EFFECT

--

COSTS OF IMPLEMENTATION (EURO - €)

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MORE DETAILS

CHALLENGE ADDRESSED

1.- Improve forest resilience and adaption to climate change

DOMAIN

Inventory, monitoring

Forest management, ecosystem, resilience

Forest disturbances, risks

TYPE OF SOLUTION

Sensors, measurement equipment

KEYWORDS

forest monitoring; sensors; machine learning; biodiversity

DIGITAL SOLUTION

Yes

INNOVATION

Yes

COUNTRY OF ORIGIN

Germany

SCALE OF APPLICATION

Cross-border/multi-lateral (several countries)

START AND END YEAR

2019 -

CONTACT DATA

OWNER OR AUTHOR

foldAI

Dr. Friedrich Förster

hello@fold.ai

https://fold.ai

REPORTER

Dr. Marie-Charlotte Hoffmann

marie-charlotte.hoffmann@wald-und-holz.nrw.de

REFERENCES AND RESOURCES

MAIN WEBSITE

https://fold.ai

PROJECT WEBSITE

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PROJECT REFERENCE

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RESOURCES

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LOGO OF BEST PRACTICE

LOGO OF MAIN ORGANIZATION

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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