

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

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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

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EXPLOITATION POTENTIAL

--

HUB

--

ECONOMIC IMPACT

--

SPECIFIC KNOWLEDGE NEEDED

--

MOBILIZATION POTENTIAL

--

SUSTAINABILITY POTENTIAL - VALUE

Very Positive

EASE OF IMPLEMENTATION

--

EASE OF IMPLEMENTATION - EVALUATION

--

KEY PREREQUISITES

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TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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JOB EFFECT

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COSTS OF IMPLEMENTATION (EURO - €)

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MORE DETAILS

CHALLENGE ADDRESSED	DOMAIN	TYPE OF SOLUTION
1.- Improve forest resilience and adaption to climate change	Inventory, monitoring Forest management, ecosystem, resilience Forest disturbances, risks	Sensors, measurement equipment
KEYWORDS	DIGITAL SOLUTION	INNOVATION
forest monitoring; sensors; machine learning; biodiversity	Yes	Yes
COUNTRY OF ORIGIN	SCALE OF APPLICATION	START AND END YEAR
Germany	Cross-border/multi-lateral (several countries)	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

POST DATE

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

