

## 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.

## DÉTAILS

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ORIGINE DU BOIS	POTENTIEL DE MOBILISATION
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TYPE DE BOIS	POTENTIEL DE DURABILITé - VALEUR
--	Très positif
TYPE DE BOIS CONCERNé	FACILITé D'IMPLéMENTATION
--	--
IMPACT SUR L'ENVIRONNEMENT ET LA BIODIVERSITé	FACILITé D'IMPLéMENTATION - ÉVALUATION
The solution helps to monitor ecosystem functions of forests and biodiversity, thereby improving risk management	--
EFFET SUR LE REVENU	PRéREQUIS CLéS
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POTENTIEL D'EXPLOITATION	TYPE D'éVÉNEMENT Où CETTE ICPE A éTé PRéSENTéE
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HUB	EFFET SUR L'EMPLOI
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IMPACT éCONOMIQUE	COÛTS D'IMPLéMENTATION (EURO - €)
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CONNAISSANCES SPéCIFIQUES REQUISES	
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**PLUS DE  
DÉTAILS**

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**DéFI CONCERNé**

1. Améliorer la résilience de la forêt et son adaptation au changement climatique

**DOMAINE**

Inventaire, diagnostic, monitoring  
Gestion forestière, sylviculture, services  
écosystémiques, résilience  
Perturbations forestières, risque, réponse aux calamités

**TYPE DE SOLUTION**

Capteurs, équipement de mesure

**MOTS-CLéS**

forest monitoring; sensors; machine learning;  
biodiversity

**SOLUTION DIGITALE**

Oui

**INNOVATION**

Oui

**PAYS D'ORIGINE**

Allemagne

**ECHELLE D'APPLICATION**

Transfrontalière/Multilatérale

**DéBUT ET FIN D'ANNéE**

2019 -

**INFORMATIONS  
DE CONTACT**

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**PROPRIéTAIRE OU AUTEUR**

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**REFERENCES  
AND RESOURCES**

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**SITE WEB PRINCIPAL**

<https://fold.ai>

**RESSOURCES**

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**SITE WEB DU PROJET**

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**RéFéRENCE DU PROJET**



LOGO DE LA BONNE  
PRATIQUE

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LOGO DE L'ORGANISATION  
PRINCIPALE

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PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A éTé CRéÉE

Rosewood 4.0

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

