

Media Kit

*For Machine Learning / Computer Vision Publishers,
Editors, and Podcast Producers*

Turning Air Filters Into Alert Sensors

*“The world's largest sensor network is already
installed. Nobody is reading it.”*

Patent-Pending Process:

PCT/US2024/031776 | WO2024/249697

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THE PROBLEM

We Bridge The Environmental Gap

Valuable environmental information is already being collected. The opportunity is missed.

The sensing asset is already installed in every building, vehicle, and machine: the air filter. It captures particle debris continuously, and it is thrown away unread.

UNKNOWN SUB-PM2.5 PARTICLE DEBRIS

Mold | Pollen | Toxins | Pollutants | Product fragments

THE GAP



Our license authorizes the process to analyze environmental exposure at scale.

Filtration media becomes a continuous data source, ready to correlate with environmental exposures.

Where Computer Vision Falls Short

01

Lab specimen, not live sensor

Many workflows require cutting physical samples from the filter due to CV system design. The filter is destroyed in order to be read.

02

Built for images, not applications

Best-in-class CV models classify well, yet they are not designed to adapt to practical, in-place analysis workflows.

03

OEM integration is years out

Engineering vision directly into air-handling products is a long-cycle effort. The industry needs a working methodology first.

This is the market gap. It is also the engineering opportunity a methodology license authorizes an integrator to solve.

Air Particle ID: Detection + Alerts

BioNAV is not an AI company. The patent-pending process is based on the action of AI results, applied to filtration media.

1

Capture

Image the filter in place. No destructive sampling.

2

Classify

Edge vision identifies particle debris classes.

3

Analyze

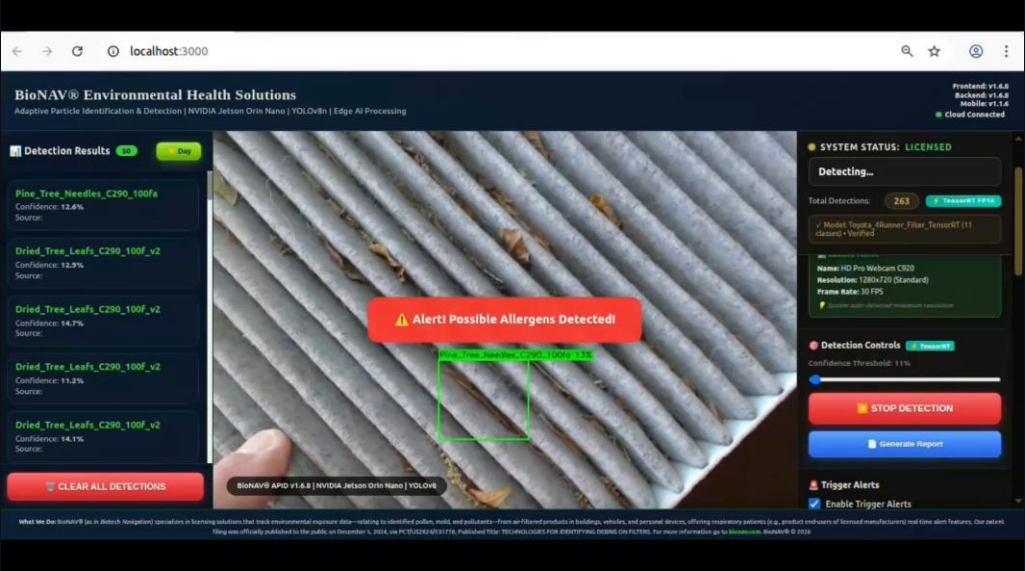
Trends and thresholds become site intelligence.

4

Automate Action

Alerts and geo-location zone notifications.

BioNAV’s Air Particle ID Proof of Concept



Our licensees design/build environmental exposure data solutions, relating to identified pollen, mold, and pollutants, from air-filtered products in buildings, vehicles, equipment, and personal devices.

Build Your Own Differentiated IP

Your team licenses the Air Particle ID methodology and develops your own software, workflow, analytics, proprietary datasets, customer solutions, and product-specific intellectual property, subject to the terms of your license agreement.

**We license the process.
You build the product.**

Our FIRST PRINCIPLES methodologies include all multi-industry specific air filtration systems and computer vision digital imaging outputs, so each licensee can build their own unique proprietary datasets with today's latest technologies.

Filtration + Computer Vision + Computing Output + Automate Action = Environmental Data

WHY ML/CV INTEGRATORS ARE PAYING ATTENTION

- ✓ Build customer-owned IP
- ✓ Drive new innovation (Environment & Industrial)
- ✓ Develop proprietary datasets
- ✓ Create recurring revenue streams
- ✓ Implement and scale fast
- ✓ Offer unique edge-to-cloud solutions

AT A GLANCE

Fact Sheet



Field Techs



Industrial



Air Handling



Defense

WHAT IT IS

Air Particle ID: patent-pending computer vision methodology for real-time particle identification on filtration media.

WHAT WE SELL

Methodology licensing only. No hardware, no software product. We license the process; you build the product.

WHO LICENSES IT

ML/CV systems integrators, developers, and product owners building edge AI and IoT solutions.

OFFERINGS

L5 Ecosystem: Edge license and Enterprise license. Capture | Classify | Analyze | Automate Action.

Working proof of concept, edge-to-cloud sync validated. Showcase presenter and top 80 innovator, 2026 ATS Respiratory Innovation Summit.

Story Angles + Interview Questions

SUGGESTED ANGLES

01

The sensor network nobody is reading: the air filter as the most overlooked data source in edge AI.

02

Not an AI company: how a process patent, not a model, creates durable IP as CV advances.

03

Why CV still cuts filters apart, and what has to change.

04

Methodology licensing as a business model for integrators building customer-owned IP.

QUESTIONS WE ANSWER ON AIR

- What is licensed, and what is the licensee able to build?
- Why a methodology patent instead of a product?
- How does the process stay valid as CV architectures change?
- What runs at the edge, and what reaches the cloud?
- Where does an integrator start, and how fast can they deploy?

We License The Process. You Build The Product.

A U.S.-based licensing and advisory company. Interviews, technical briefings, and contributed-article proposals welcome. Brand imagery, proof-of-concept footage, and founder headshot available on request.



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Available for interviews and comments for magazine publishers and podcasters.

