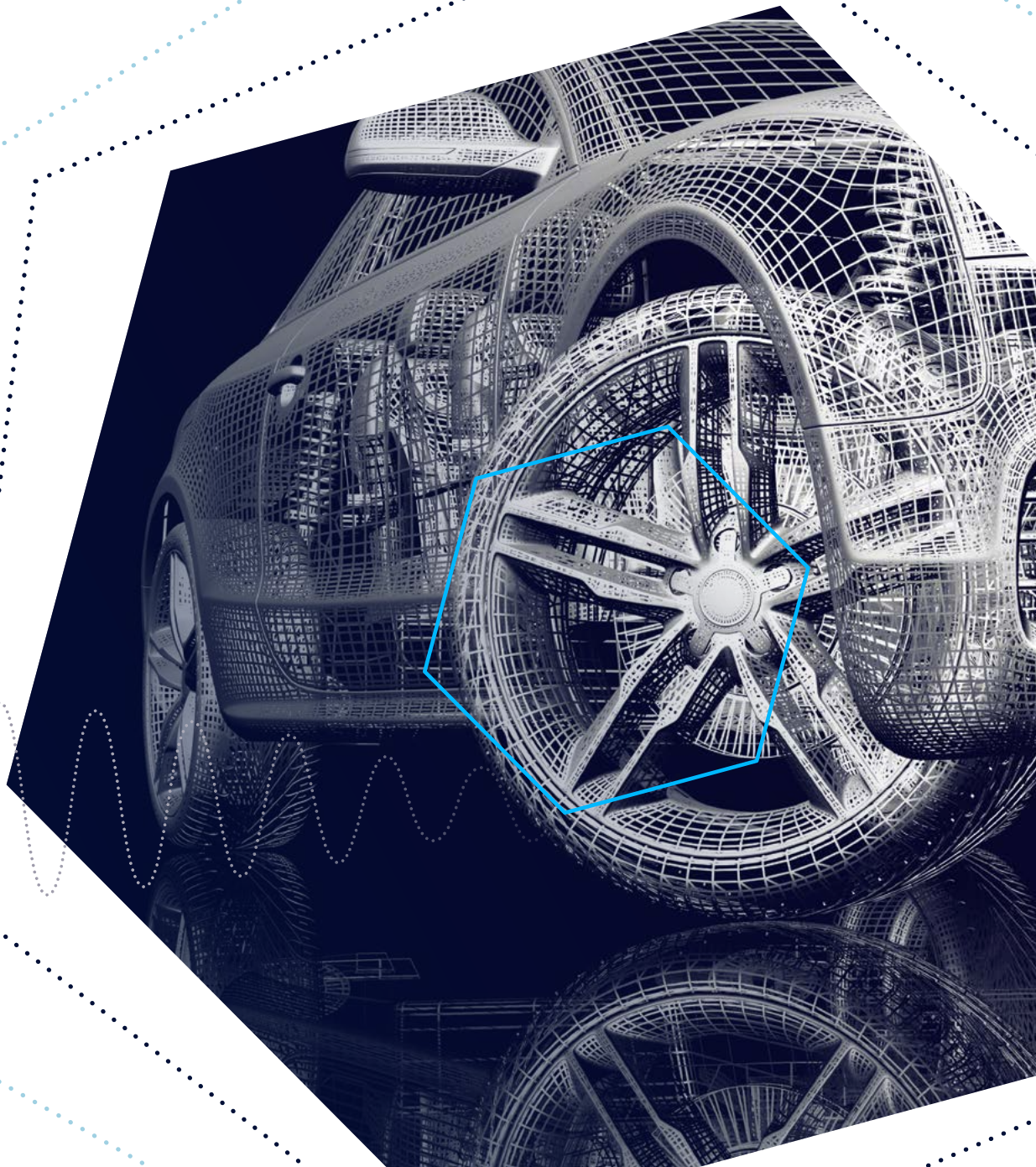


Ready-to-Use AI-Powered Automotive Applications



It's Not About the AI It's About the ROI!

Our AI Does the Heavy Lifting, You Focus on Results

Binah.ai's bottom line-focused solution – Binah.NOW
– features out-of-the-box, AI-powered use cases that
deliver immediate answers to complex problems
**at previously impossible levels of
accuracy, performance, and stability.**

Binah.ai uses a **revolutionary approach** to data analytics by **combining signal processing and AI** that accelerates the path from data to insights, coupled with a proprietary, comprehensive machine and deep-learning framework delivering actionable, best-in-class results.

Signal Processing - A New Paradigm for Accuracy in AI

Binah.ai captures the knowledge, experience, and best practices of the world's most advanced researchers. The use of Signal Processing enhances the quality of the input leading to outstanding achievements:



Increases signal-to-noise ratio (SNR)



Creates clean data



Analyzes data sets of any size



Eliminates outliers



Streamlines data volume



Delivers a better overall data set



Extracts new features

Driver and Passenger Video-based Vital Signs and Stress Level Retrieval

The Importance of In-car Health Monitoring

Drivers' safety and the safe operation of vehicles will always be an important focus. With autonomous cars, tracking what's happening inside the vehicle is just as critical. If an emergency health problem occurs, the passengers may not be able to reach medical help in time. Being able to constantly monitor autonomous vehicles passengers' well-being should be a key goal for ensuring a safe ride.

Binah.ai's Solution – Binah.NOW

Binah.NOW's Heart Rate Variability (HRV) and Stress-level solutions deliver non-intrusive, "no-touch" heart rate and mental stress-level monitoring using a simple video feed in real time. Binah.ai is currently working on video-based alcohol blood-level and blood pressure measurement.

Binah.NOW's Heart Rate monitoring consists of:

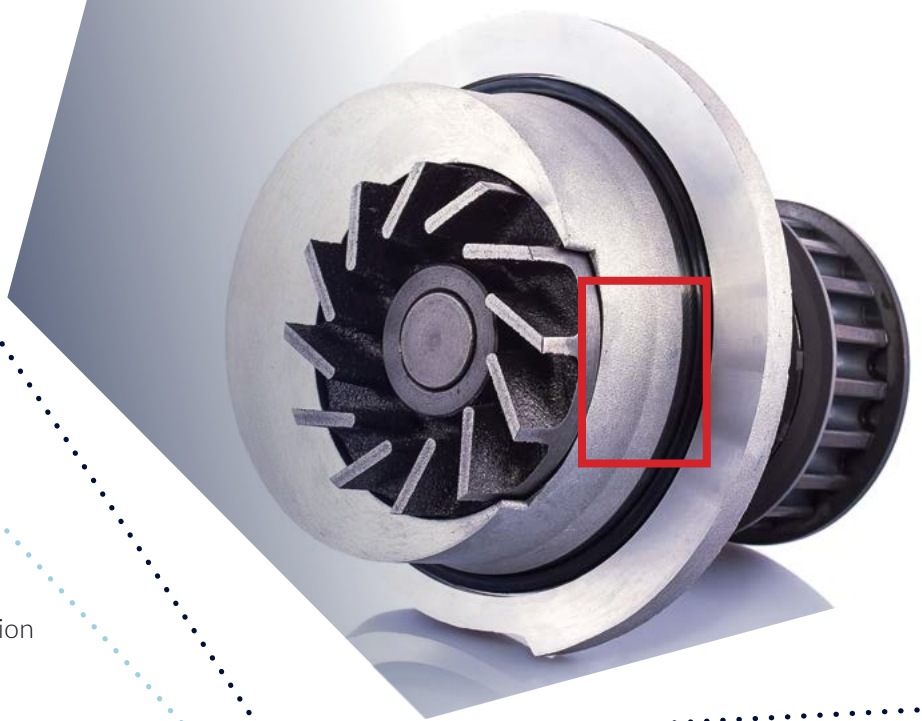
- Optimized face detection and tracking
- Motion compensation correcting movement and shaking
- Illumination normalization to support fluctuating lighting conditions
- Automated selection of skin region of interest
- Crafted heart rate estimation algorithm
- Not based on statistical estimations
- Available as an SDK for Android and for iPhone



Visual Inspection for Defect Detection

As part of the global Industry 4.0 revolution, smart production technologies that increase productivity and reduce costs are being integrated into manufacturing environments. Computer vision-based techniques were developed to overcome the limitations of human visual inspection by detecting damage via remote images.

Binah.ai has developed its own algorithmic backend that solves an endless number of real data-driven industrial challenges in real time/quasi real time with extremely high accuracy. Binah.ai combines signal processing, machine learning and deep learning to create accurate and stable models.



Key Issues in Visual Inspection for Defect Detection

- Defining a representative normal region is challenging
- The boundary between normal and outlying behavior is often not precise
- The exact notion of an outlier is different for different application domains
- Availability of labelled data for training/validation
- The data might contain noise
- Normal behavior keeps evolving

Binah.ai's Visual Inspection Advantages

- Agnostic – Can be aligned to any part type quickly
- Extremely high accuracy – Most parts at **98.x+% accuracy** and **under 1% false positive**
- Quasi real-time performance – Processing dozens of images a second
- Detecting new types of defects – Anomaly detection
- Marking the defect – Creating a heatmap for each image as an output (besides probability)
- Ultra-adaptiveness and noise/environmental robustness

Success Story

Sompo Japan Nipponkoa Himawari Life Insurance, one of Japan's largest insurance companies, aims to develop new healthcare services which enable customers to understand their own health status (such as stress) and get advice, by utilizing Binah.ai's technology: data format-agnostic / signal processing / machine learning, and proprietary algorithms with existing medical / and health data.

https://www.sompo-hd.com/~media/hd/en/files/news/2019/e_20190116_1.pdf

Why Binah.ai?



Unprecedented
Stability



Minimal
Investment



Quick
Integration



Drives Cost
Reductions



Exceptional
ROI



Increases
Safety



Accelerates
Production

AI Your Future Today

Binah.ai is shaping the future of Artificial Intelligence (AI) by simplifying and accelerating AI adoption with enterprise-ready apps. By delivering on our vision of “AI Your Future Today,” we allow companies to focus energy and resources on creating new, value-added services powered by proven AI apps rather than developing in-house capabilities. At Binah.ai, we apply our world-leading expertise in machine and deep learning, signal processing and AI, addressing high-value problems at major clients around the world, in fields such as Insurance, Digital Healthcare, Industry 4.0 Manufacturing, Capital Markets, and more. For more information on Binah.ai solutions, please visit www.binah.ai or write us at info@binah.ai.



Cool Vendor in AI Core Technologies 2019

August 2019 | <https://www.gartner.com/en/documents/3956729/cool-vendors-in-ai-core-technologies>

Industries We Empower



Automotive



Insurance



Digital Healthcare



Wellness



Manufacturing



Capital Markets

Built for Businesses

- **99.99% availability:** Complete redundancy ensures continuous operations
- **Best-in-class maintenance:** Perpetually automated, up-to-date models ensure the best results, consistently
- **Customized for your needs:** Use Binah.ai's data science team to solve your specific challenges
- **Enterprise-grade:** Built-in security and data protection ensure continuity and reliability

Excellence Center

For a more customized experience

Binah.ai out-of-the-box use cases answer most critical business questions; the underlying technology can be applied to any industry. Our Excellence Center experts partner with your organization to define your specific challenges and create dedicated solutions that provide unique, actionable business insights.

Leveraging AI Has Never Been Easier

Out-of-the-box applications enable organizations to solve almost any challenge without spending millions on custom-created research, delivering:

- Actionable results - With a few simple steps and some data, whether customer's or public
- At-the-ready use cases - With the simple selection of appropriate use cases that solve specific challenges
- Rapid deployment and actionable results - Requires no corporate infrastructure to derive its answers

Easy Integration | Flexible Delivery | Runs on Cloud or on the Edge | Receives Multiple Data Sources | Full API

Why Binah.ai Ready-to-use Applications?



Out-of-the
Box



Outstanding
Accuracy



Unprecedented
Stability



Low
Investment



Quick
Integration



Exceptional
ROI

Awards



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