

Pave the Path to Wellbeing with Remote, Video-based Wellness Monitoring



# Millions of Deaths Can Be Prevented

Each year, millions of people worldwide die from preventable illnesses like cardiovascular disease, chronic lower respiratory diseases, and more. In addition to the pain and suffering they cause, preventable diseases place an enormous burden on society, economies, medical systems, and medical staff. While generating a surging wellness industry, this understanding has led the healthcare and insurance industries to devote more resources towards wellness, a preventive and holistic approach to care.





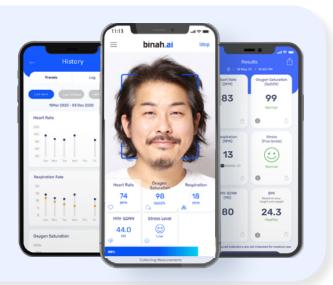
# **Wellness Requires Awareness**

According to the Global Wellness institute, wellness is associated with cultivating awareness and making choices that lead towards optimal, holistic health and wellbeing. Developing this state of awareness requires individuals to frequently monitor and assess their mental and physical wellbeing in order to adjust their habits and behaviors accordingly.

While practices like mindfulness meditation and journaling provide meaningful insights into wellbeing status, these insights ought to be complemented with physical indicators of bodily function. Yet, no truly accessible, affordable, or easy-to-use wellness monitoring tools have been made available. Organizations and providers need a new set of tools to offer individuals support along their wellness journeys.

# A Wellness Monitoring Tool for Anyone, Anytime, Anywhere

Binah.ai developed an award-winning technology that transforms any camera equipped device (smartphone, tablet, laptop) into a health and wellness monitoring solution. Binah.ai's video-based monitoring removes the need for wearables and allows anyone to extract vital signs measurements from the palm of their hands. The vital signs measured shed light on several aspects of wellness including stress reduction, nutrition management, and preventable disease prevention.





# **The Vital Vitals**

Binah.ai's monitoring solution allows the user to measure heart rate, heart rate variability (SDNN and/or RRi raw data), blood oxygen, and respiratory rate, vital signs that are intimately related to a wide range of diseases, including cardiovascular, diabetes, respiratory and more. In addition to vital signs, Binah.ai provides users with the unique ability to monitor mental stress levels, serving as the perfect tool in the fight against the devastating impact of long-term stress on wellbeing.

# binah.ai Blood Pressure (Coming Soon)

Heart Rate

# Binah.ai Health Score



Binah.ai's health score, developed by our medical team, provides a way for customers to quantify the long-term mortality risk and hidden health issues of adult clients (ages 18-60) who claim to have no medical issues. Using a combination of extracted vital signs, including HR, HRV and Mental Stress levels, Binah.ai's health score places the health risk of clients on a scale ranging from 0 (lowest risk) to 9 (highest risk).

# **Managing Stress**

Mental stress is at the root of various medical and psychological conditions. Continuous strain on the body due to stress may contribute to serious health problems and mental disorders, including heart disease, high blood pressure, diabetes, depression and anxiety. Consequently, learning to regulate stress is a critical component of wellness and preventive medicine. With Binah.ai's mental stress monitoring feature, users can gain insights into stress patterns and use the provided data trends and history to make the lifestyle changes necessary to minimize and cope with stress.



# **Support Wellness Journeys with Binah.ai**

Wellness Program Path Binah.ai's Support at Every Step Benchmark starting point using Initial screening and questionnaire real-time health data Monitor vital signs regularly to **Progress** track progress Adjust intensity and re-align goals Follow up + Intensity adjustment using data trends Increase participant confidence Goal and engagement with specific, measurable goals Maintain healthy lifestyle Maintenance through consistent monitoring and remote follow-up



# How Binah.ai's Technology Works

Binah.ai uses a unique mix of signal processing and AI technologies to extract and analyze a signal taken from the upper cheek area of the face. Delivering consistent results in under one minute, Binah.ai's technology supports any age, skin color and gender. Binah.ai's five stress levels are calculated based on the Baevsky Stress Index.

## Light Analysis

Light from surrounding environment or device torch penetrates the skin and reflects off blood vessels to camera.

### **Luminance Correction**

When required, light levels are processed to improve vital signs accuracy.

### **RGB Data Extraction**

Skin detection is performed on each ROI followed by extraction of RGB (red, green, blue values).



### Camera Calibration

Binah.ai connects to camera and receives captured video stream. If necessary, camera parameters automatically adjust to optimize video feed.

### **ROI Detection**

Region of interest is cropped from full image.

## Vital Signs Calculations

Each vital sign is calculated based on varying quantities of data. Results appear within 10 sec. to 1 min.



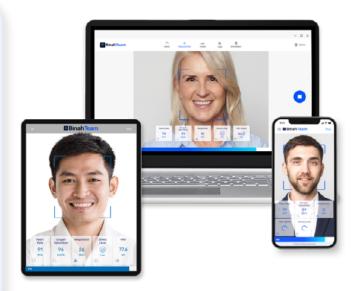
# **Delivery**

### **Binah SDK (Software Development Kit)**

- Easily integrate Binah.ai's technology into your own app or infrastructure.
- Available for: iPhone (8 and up) and Android smartphones,
   Windows 10 laptops and desktops. iPad (6th generation and up).
   Support for Android tablets available in 2021.

### Binah Team - Ready-to-use Health and Wellness Monitoring Solution

- Includes a SaaS-based management platform and end-user application.
- Immediately available on a per-user model, no integration needed.
- Available for: iPhone (8 and up) and Android smartphones,
   Windows 10 laptops and desktops.





# **Industries We Empower**

Numerous industries can help clients, customers, and employees improve their health and wellbeing through remote wellness monitoring. Binah.ai's monitoring tool can support:



### Wellness Monitoring for Insurance

- Develop or augment Wellness programs with a personal and informative tool
- Reduce operational costs: eliminate the need for wearables and minimize in-person evaluations and health assessments
- Enhance risk assessment with real-time health data
- Extend outreach to remote locations
- Encourage clients to achieve and maintain wellbeing
- Help clients tackle health problems ahead of time



# **Wellness Program Providers**

- Increase program efficacy with deeper insight into participant health
- Reduce costs by eliminating the need for wearables
- Track progress using remote, real time vital sign data
- Reduce customer churn by proving progress and efficacy of your wellness program on the customer's overall health (heart rate, mental stress levels etc.)



# **Corporate Wellness**

- Create a resilient and invigorating work culture by empowering employees to achieve wellbeing
- Encourage stress monitoring and management to reduce absenteeism and stimulate productivity
- Reduce stress among employees working from home
- Reduce employer health insurance costs



### **Customers' Wellness**

- Reward your clients with a wellness monitoring solution
- Enhance customer satisfaction and personalize user experience with an added barefit.
- Have customers scan vital signs before accessing your facilities and decrease likelihood of COVID-19 spread



### Wellness Monitoring for Ageing in Place

- Support independence of elderly patients with remote wellness monitoring
- Provide caretakers with tools to measure elderly wellness from the comfort of their own homes
- Enable elderly and their family members to stay informed and at ease through real-time updates
- Reduce unnecessary travel to health clinics



### Wellness Monitoring for Healthcare

- Augment telehealth technology and preventive care with remote wellness monitoring
- Remotely monitor chronic illness and allow patients to recover from home
- Collect and save patients wellness data in EMRs
- Reduce the strain on medical facilities and staff
- Track granular data on patient welfare over time
- Reduce healthcare costs equipment, work hours etc.



# Health. Care. Anywhere.

# Powering Applications that Shape the Future of Health and Wellness

Binah.ai's award-winning technology delivers on the company's vision and mission to allow for basic and universally accessible health and wellness services for everyone, anytime, anywhere. We are shaping the future of healthcare and wellness by transforming any smartphone, tablet or laptop into a vital signs monitoring tool. Binah.ai's technology has countless use cases that span fields including telemedicine, remote patient monitoring, primary care, personal and corporate wellness, preventive medicine, virtual trials, nursing homes, insurance and many more. Our technology is used by leading global organizations that understand that the latest technologies and connected services are the roadmap to personalized, streamlined, and universally accessible health services, empowering both organizations and personal users alike.

For more information on Binah.ai, please visit: www.binah.ai or write to us at info@binah.ai

# **Industries We Empower**



Healthcare







**Automotive** 





# **Selected Customers**







# momentum

# **Recent Market Recognition**



CFS Innovation Awards 2020



Juniper Research Platinum Winner



DOMAIN CHAMPION NTT Data 10th Open Innovation International Contest 2020



**GRAND CHAMPION** NTT Data 10th Open Innovation International Contest 2020



Gartner Cool Vendor in Al Core Technologies 2019

# Why Binah.ai?



Always Available

May run locally on device, without internet connection.



Seamless Integration

Delivered as an easy-to-integrate SDK or ready-to-use app.



Easy-to-use

Detects vital signs just by looking at any device's camera.



For All

Agnostic to age, gender and skin color.



Proven

In use with tens of millions of end-users in the insurance, healthcare and wellness industries.



## Accessible

No wearables needed available on smartphones, tablets and laptops.



### No Privacy Concerns

Binah.ai does not save images or video streams. Final measurement results are secured and encrypted.