structhealth

INNOVATING RESILIENCE, MONITORING EXCELLENCE

2024

STRUCTURAL HEALTH MONITORING
SYSTEMS EARLY WARNING SYSTEMS
EARTHQUAKE/DISASTER RISK REDUCTION

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HELLO!

At StructHEALTH, our team specializes in structural health monitoring (HSI) systems and early warning systems. Our experts carry out comprehensive studies on earthquake and disaster mitigation in order to provide effective solutions.

Structural Health Monitoring (SPI) systems offer a number of benefits across a variety of industries by providing real-time data and insights into the condition of structures.

1. Early Detection of Structural Problems
2. Increased Security
3. Saving
4. predictive maintenance
5. Extended Asset Life
6. Improved Operational Efficiency
7. Data-Based Decision Making
8. Remote monitoring
9. Advanced Structural Design
10. Compliance with Regulations
11. risk reduction
12. Optimized Resource Allocation

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ABOUT THE COMPANY

StructHEALTH Technology is a company with a **passionate** and **ambitious** team dedicated to pioneering advances in infrastructure resilience and delivering innovative solutions for structural monitoring. Their goal is to redefine industry standards**.**

StructHEALTH Technology aims to be **a global leader** in structural health monitoring by pushing the boundaries of technology to protect critical infrastructure around the world.

StructHEALTH Technology is committed to benefiting society through technology that increases **structural safety** and **longevity**, promotes sustainable development, and creates resilient communities. **The company's mission** is to **move beyond structural health monitoring needs with cutting-edge solutions.**

StructHEALTH Technology values collaboration, innovation and a customer-focused approach. The company seeks **partnerships** that increase its impact and provide solutions to customers' challenges.

StructHEALTH Technology aims to make a **significant contribution** to the field of structural health monitoring and **create a safer, more sustainable world** with the development of new generation monitoring systems.

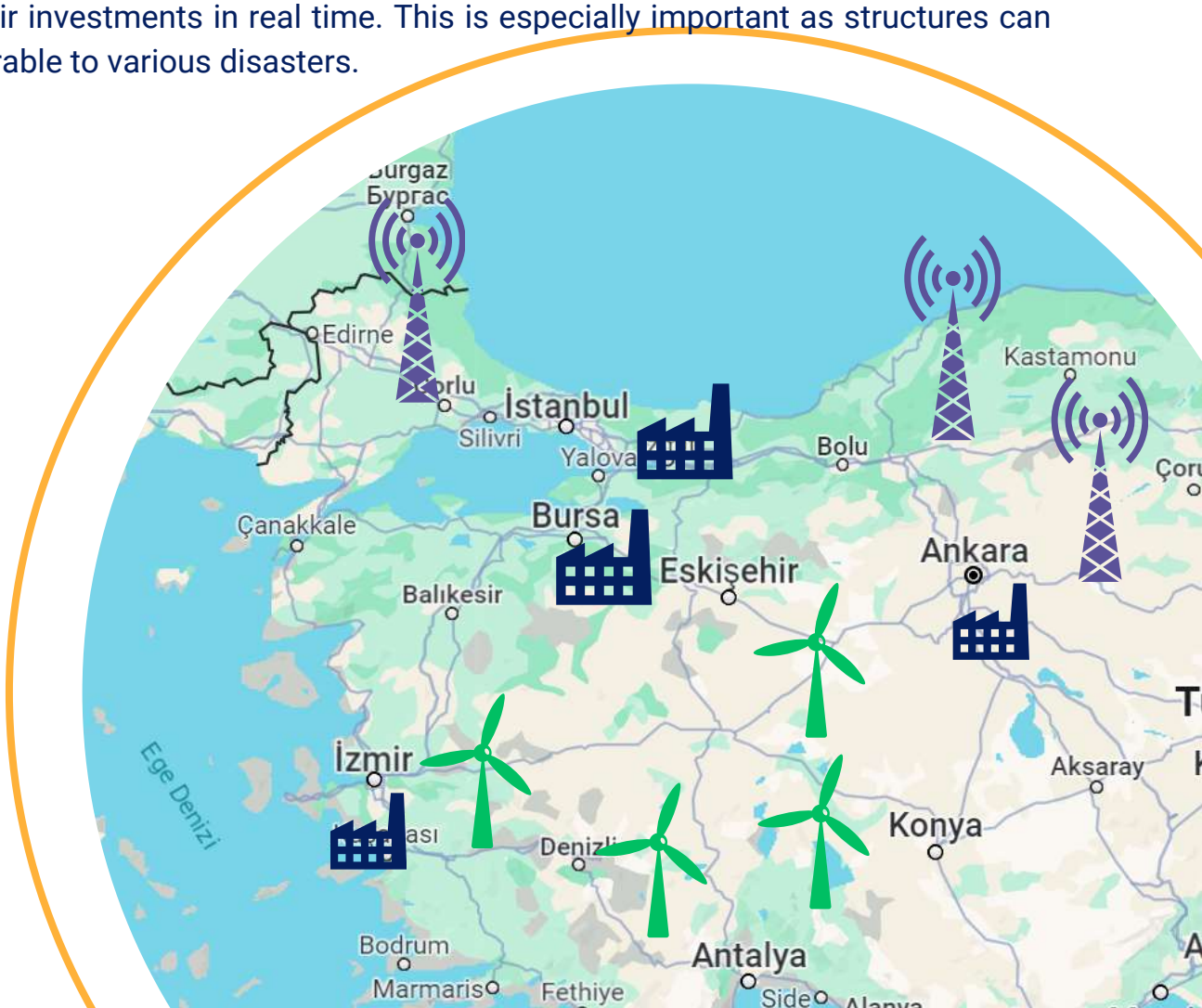
OUR SERVICE

COMPANY

The application area of Structural Health Monitoring (SHM) systems is diverse and covers a variety of industries where continuous monitoring of structures is essential for safety, efficiency and maintenance. Some important application areas of SPI systems are:
Civil Infrastructure: **Bridges/Dams/Tunnels/Motorways** and **highways/Buildings**
Energy Sector: **Wind turbines/Oil and gas pipelines/Power plants Industrial**
Facilities: **Factories/Industrial** equipment and structures, etc.

FOCUS AREA

StructHEALTH specializes in monitoring the structural integrity of a variety of structures including **wind turbines**, **telecom towers**, **skyscrapers** and **factories**. Our team has developed advanced systems and algorithms that enable clients to track their investments in real time. This is especially important as structures can be vulnerable to various disasters.



HOW WE WORK

1 StructHEALTH produces hardware (accelerometer, inclinometer, protractor) and Software as a Service (Saas). StructHEALTH works B2B, frequently producing reports on the health of structures.

Accelerometer and Inclinometer hybrid sensor

Cloud connected IoT

2 Customers only cover the cost of electronic devices. Monthly/annual subscription models have been developed for continuous monitoring of building health.

3 With the subscription model it offers to customers, StructHEALTH provides SaaS services in many different areas such as storing the data of their structures, processing them, constantly analyzing them, showing whether they have reached threshold values, regular reporting, indicating which structures should be responded to urgently in case of disaster, sharing data when requested, optimizing maintenance processes. .

Analyzes and Reports

HOW DOES IT WORK?

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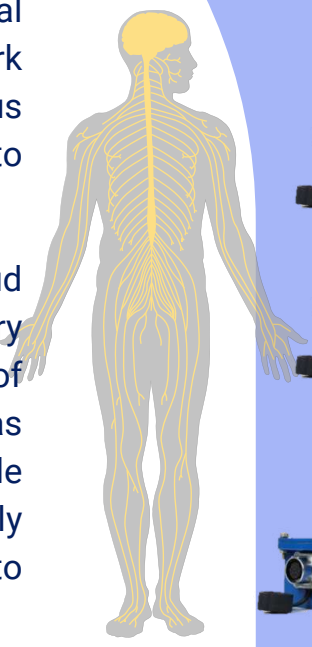
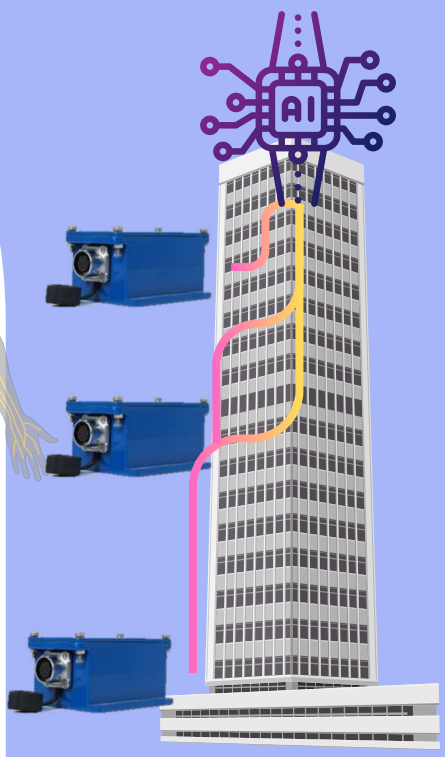
Just like in humans, electronic sensors are neural networks of structures. The sensor network surrounding the structure provides a continuous flow of data about the status of the structure to the data processing and storage center.

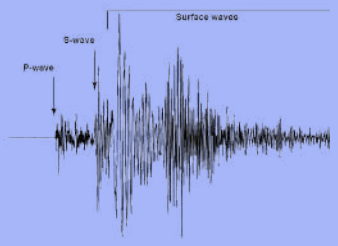




Electronic sensors, embedded systems and cloud systems constantly make the necessary calculations to estimate the possible risks of structures in real time. Algorithms such as structure frequency, mode shapes, mode damping, modal security criteria consistently analyze the behavior of structures according to threshold values.

In summary, just as ECGs are taken for people, we also take ECGs for structures. Just like in humans, if rhythm disorders are found, we take action to provide urgent intervention.

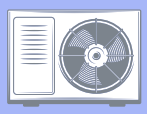
We act as a digital stethoscope for buildings.



Early Warning Systems for Facilities

It provides early earthquake detection services for organizations that use smart management systems such as factories, shopping malls and site management. Algorithms that detect the primary wave send "Earthquake" information to management information systems, which affect elevators, generators, production lines, press machines, etc. In short, it ensures that everything connected to the management system is stopped.

Lift



Ventilation

Escalator

Generator

Electricity

Alarm

Higher safety factors do not guarantee that a structure will not collapse.

StructHEALTH TEAM,

When each member of the team is dedicated to a common goal, their collective efforts can lead to success beyond what any individual could achieve alone. With a passionate and ambitious team by your side, the possibilities for growth and success are endless.

Management

Erhan AK
Chairman of the Board

Yücel SAYKAL
Vice President

Volkan ERGEN
Member

Organization

Volkan ERGEN
CEO
Earthquake and Structural Engineer

ASSOC. PROF. CAN ZULFIKAR
CTO
Assoc. Prof. Earthquake and Structural Engineering

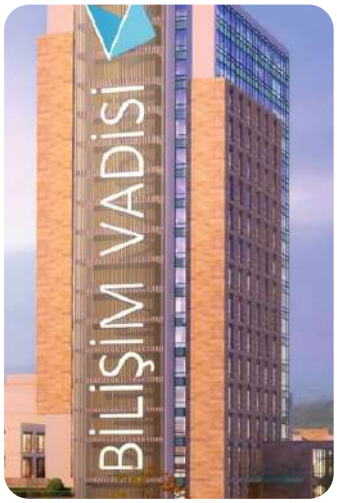
Ramazan ÇUBUKCI
CIO
Computer Engineer

Efe ÖZCANLI
CMO
Earthquake and Structural Engineer

Ahmet Said SAVAŞ
Embedded Software Engineer

Fatih AYDEMİR
Computer Engineer

OUR PROJECTS



IT Valley High-rise Office building

2018

İGDAŞ Strong Ground Motion Monitoring System

More than 500 sensors are active in ISTANBUL

Burdur Hospital

2023

Ferrero Duzce Factory

2023

Yatağan Hospital

2022

ISTANBUL – ITU University Nuclear Reactor Building

2015

Only a few experiences are shown.

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SAVE YOUR FUTURE ---- START NOW

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