

Cassiopée

e-Health | *behavioral data analytics*

e-Sport | *objective and subjective data analytics*

e-Social | *social behavior*



Cassiopée Applied Analytical Systems

Lausanne, Switzerland
Tel.: +41 079 317 7889
cassiopee.org

Cassiopée

Life Sciences

Emerging technology-assisted approaches in life sciences and especially in clinical practices are the appropriate steps for addressing the needs of highly emotional workplaces and clinical wards, to obtain fast and reliable diagnoses. In general, for such technologies to be commercially successful Cassiopée delivers the following tools.

1. *Computational ecosystem to monitor symptoms and signs over a longer and continuous time period.*
2. *Platforms that are capable of patient, emotional workplace identification and sport performance improvement and risk injury.*
3. *Improved technology assisted diagnostics by removing subjectivity, reducing cost, monitoring treatments and interventions, providing objective longitudinal compound measures of behavioral and physiological states that are currently absent.*
4. *Tools to monitor health-risks indexes using Artificial Intelligence to combine both objective and subjective data.*

Digital Diagnostic

Wearable non-invasive continuous psychological sensing and evaluation technology is composed of novel wearable non-disruptive multi-channel Human sensor pads and criteria evaluators using advanced mathematical tools including Artificial Intelligence, and AI/cloud-based diagnosis, feedback and management protocols.

Business Model

This business model addresses the need to monitor various stress-inducing interactions among employees at emotional workspaces; elderly patients with cognitive impairment in psychiatric and nursing home environments, and performance, improvements and risk of injury of active athletes.

Our business concept consists of the e-Health monitoring system based on behavioral data analytics, e-Sport based on combination of both subjective and objective data analytics, and e-Wearables yielding clinical μ -biosensors.

Personalized Medicine

The specific technological challenge is to combine advanced wearable non-intrusive multi-modal sensors with e-Health analyses, diagnoses, treatment, and various types of interventions.

Technology-assisted approaches are essential to improve diagnostic accuracy in terms of both qualities and quantity. Interventions include

1. *Active devices designed to continuously measure locomotor and/or physiological patterns and their parameters using high-resolution GPS and wearable sensors to measure displacement, body posture, heart frequency, electro-dermal transduction, etc.*
2. *Passive devices designed to monitor behavioral patterns in confined environments monitoring environmental interactions*
3. *Complex mathematical analyses that reduce an otherwise overwhelming quantity and flow of behavioral or physiological data to an easily usable significant data extract.*