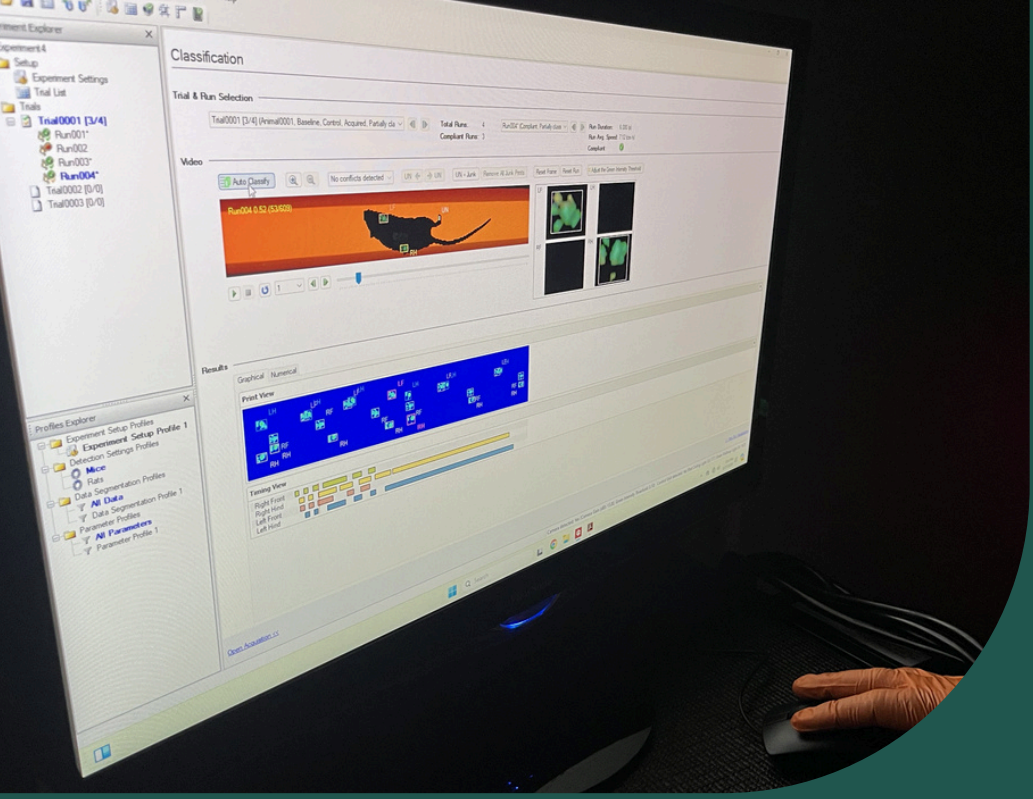


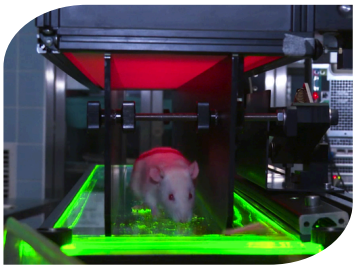
CatWalk

The best gait analysis system for your research

Why CatWalk is the superior method

NOLDUS

www.noldus.com/catwalk



Benefits of CatWalk

Using CatWalk™ allows you to collect high-quality, high-throughput data on gait and locomotion in both mice and rats. Here is how it compares to its competition.

Forced movement & changed behavior

When performing gait analysis, it is important to ensure naturalistic behavior in order to isolate scientfically relevant changes. Natural gait, as it is called, can be altered due to various reasons such as neurological disorders, musculoskeletal issues, or pain.

Forced, unnatural, gait, on the other hand, might be a result of an individual consciously or unconsciously trying to compensate for discomfort, injury, or disability. The Noldus Catwalk is a system that measures free walking gait, ensuring proper phenotyping and naturalistic gait.

Treadmill systems, such as the DigiGait, create an environment that induces forced gait. When implementing forced gait, the incentive, or requirement, to walk goes beyond the natural (or unnatural in the case of disorders) gait, which in turn alters the phenotype.

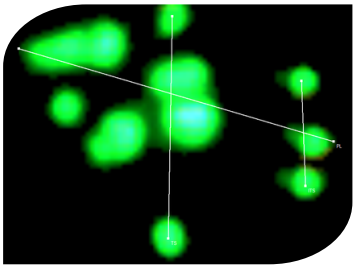
Furthermore, behaviors like back arching, ducking and speed compensation will influence the results of most runs on a treadmill. As a researcher you would need to manually select video segments without these behaviors, which also creates experimenter bias.

Being on a treadmill can also cause stress, exacerbated by the bright light environment that is needed for DigiGait to function. This could result in an impaired behavioral reaction to the parameters set by your research.

The benefits of a walkway

Minute deviations in gait are sometimes difficult to spot. That is why having a standardized environment will result in a reliable and repeatable data stream.

Walkway systems like CatWalk are uniquely suited for producing consistent runs. Since runs always have the same length, and are bound to the same defined compliance criteria it is possible to record and compare multiple gait cycles in a single run and/or across runs and animals, increasing throughput and richness of the data.



Systems like the BlackBox Two, an open field system, are used for measuring pose estimation in combination with behavioral data but are not ideal for longitudinal gait research.

Erratic movement in an open field makes it difficult to compare runs to differentiate experimental groups and time points, and does not facilitate a true stride phenotype.

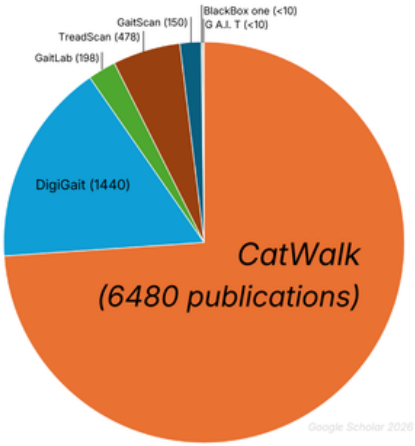
One System for all models

CatWalk has been validated for many different disease and disorder models. It has been adopted as the gold standard for many applications like research into Alzheimer's disease, Parkinson's disease, Ataxia, Traumatic brain injury, pain and many more.

Furthermore, CatWalk works for any small mammal you want to use in your research. While mice and rats are the most often used models for gait analysis, CatWalk also accommodates for guinea pigs or even small monkey species. Unlike systems only designed for mice, like the GA.I.T., you can easily change your setup to fit other species or animals across many stages of their life.

> "The tool that truly transformed our workflow is the automated CatWalk system." -Pozzilab, Canada

That is why CatWalk has been the most published gait analysis system for over 20 years. Its ease of use combined with powerful data collection and analysis options gives you a versatile system for all your gait and locomotion needs.



Noldus services & succes

Not only is CatWalk the best system for gait analysis, Noldus makes sure that you get the most out of your research from start to well beyond finish. Our international team of experts are always available to answer your questions, from assistance with your setup, to consultancy on behavioral research and results interpretation.

Through the NoldusCare program you also gain a wide variety of additional perks. From express support and extended warranty on your hardware to free software upgrades.

Furthermore, with Noldus Academy, onboarding new collaborators becomes effortless. With step-by-step installation guides, interesting webinars and access to live Q&A's with our trainers, Noldus makes sure that you have everything you need to succeed.

A system is only as good as its software

The quality of your data doesn't only rely on the hardware, but also on the way the data is analyzed.

CatWalk allows for quick acquisition, after a run is performed the data is available immediately. Furthermore, CatWalk, unlike systems like Digigait, is based on real gait data, not an assumption-based algorithm.

This method provides high-quality data with very minimal errors, and no coloring of paws needed (to increase contrast). No need to spend hours going through your data and manually correcting every frame.

However, if you feel the need to go back and refine your data, you can do that. Unlike Digigait, CatWalk is not a blackbox and allows for full transparency and export of your data. With CatWalk you are always in control.

Feature	CatWalk	Digigait	BlackBox	GA.I.T
Stress-reducing voluntary walking	✓		✓	✓
Dedicated gait analysis system	✓	✓		✓
Works in a low light environment	✓		✓	✓
Usable for both mice and rats with a width adjustable walkway	✓			
Study gait on inclined or declined surface		✓		
No assumption based footprint tracking	✓			✓
Auto-scoring of non-gait behaviors			✓	
Amount of parameters measured	98	35	20	59
200fps camera for detailed analysis	✓			
Free analysis module for remote PC's	✓		✓	?
Publications (as of 2026)	6400+	1400+	<10	<10

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