




MovAlyzeR® software with a pen tablet or scanner is the cost-effective solution for accurate human movement analysis for:

- Human movement research
- Psychology
- Psychiatry
- Clinical Research
- Neurology
- Movement Disorders
- Motor learning
- Visuomotor control
- Physiotherapy
- Occupational therapy
- Remedial teaching
- Child education
- Child development
- Forensics
- Computer science
- Artificial Intelligence
- Human-Computer Interaction

 **MovAlyzeR** pen movement software includes:


 **MovAlyzeRx** simple interface for running tests

 **Stimulus editor** stimulus creator for interactive, animated, audiovisual tests.

Secure software for **all Microsoft Windows** PCs



The Better Business Bureau gave NeuroScript an A+ rating. Go to: www.bbb.org and find: NeuroScript

NeuroScript® is reseller of  pen tablets for the Americas

Background: Microscopy of overlapping lines revealing the sequence of pen strokes (John P. Conley)


www.NeuroScriptSoftware.com

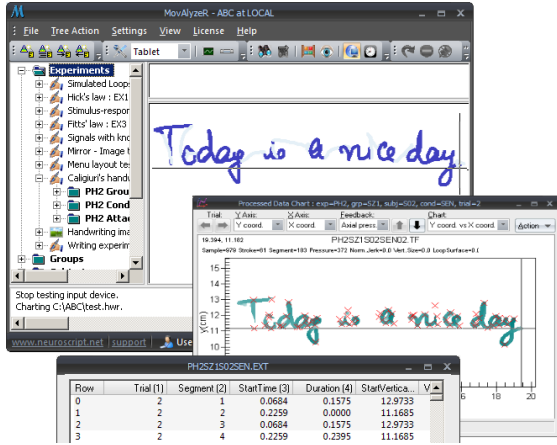
Your NeuroScript Representative:



Handwriting Movement
Analysis Software

*Measure
Motor Skills
Today!*

NeuroScript® MovAlzyer®



Record handwriting or mouse movements, process, and visualize the data and immediately obtain norms, charts and numerical summary results.

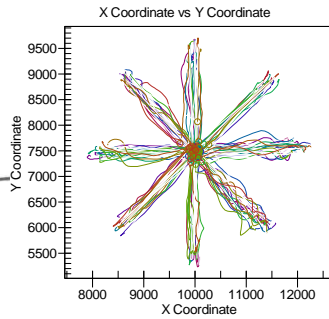
Overview

MovAlzyer offers a comprehensive solution to quickly and accurately perform handwriting or mouse movement tests or process handwriting images.

Automatic consistency checking after each trial facilitates decision to re-record on the spot and ensures objective analysis in non-blinded research.

Results will be available immediately after each test all.

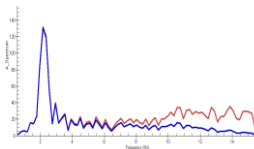
Recordings of long messages can be made with MovAlzyer. Individual words can be automatically extracted from such recordings and then various kinematic measurements can be made.



Goal directed movements of Parkinson's disease

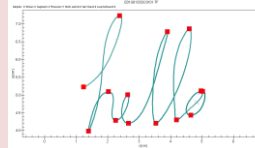
Concept to Journal in 7 Steps

1. Create your test ● Audiovisual animated stimuli ● Record pen tablet or mouse movements



2. Filter data to remove noise through spectral analysis ● Estimate speed, acceleration, jerk, duration, spectrum, ...

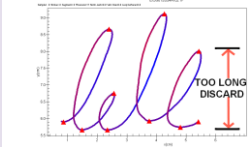
3. Segmentation into words + strokes ● preprogrammed submovement ● fine adjustment ● submovement



Segment (2)	StartTime (3)	Duration (4)	StartVertica...	VerticaSc...	PenVel
1	0.2500	0.8158	5.6978	2.1248	4.2
2	1.0658	0.7918	7.8226	-2.6290	-5.2
3	1.8576	0.8482	5.1836	4.0892	7.6
4	2.7057	0.5277	9.2728	1.7279	5.2
5	3.2534	0.6529	11.0006	-0.3547	-2.4
6	3.8853	0.6229	10.4458	3.6138	9.2
7	4.5182	0.7155	14.2997	-3.5186	-7.6
8	5.2337	0.6402	10.7810	0.0433	2.2
A	0.0748	0.7021	10.0742	7.0000	4.4

4. 30+ Kinematic and static features extracted per stroke

5. Consistency check of extracted parameters



Exclude strokes using threshold relative pen down duration

with pen-lifts -OR- Threshold: 0

without pen-lifts

Collapse Data

Collapse across all strokes -OR-

Collapse across gds and even strokes

AND/OR

Collapse across trials

Use: Averages Medians

6. Summarize and quick statistics

7. Journal-quality paper ● Title ● Abstract ● Intro ● Methods (Participants, Equipments, Design, Analysis + charts!, Results) ● Discussion ● References.

Michael Benedict

Features

Highly customizable

Graphical stimulus editor for interactive visual stimuli

Auditory stimuli

Trial randomization rules

Word extraction from long paragraphs

Ultra-sharp vector graphics charts

Handwriting image processing

Data-centered or patient-centered user interfaces

Multi-site, multi-user database

Test signal generation

Tablet accuracy test

Norm database

Test yourself:

Visit: www.neuroscriptsoftware.com

Download, install, activate full-featured MovAlzyer trial

Test your first participant **today**.