Grupo kosmo science

KOSMO.IA

TECHNOLOGY AT THE SERVICE OF SCIENCE

MACHINE LEARNING REVOLUTIONIZES THE ASSESSMENT OF SHINE IN CURLY AND COILY HAIR



Strand selection
Curly hair strands

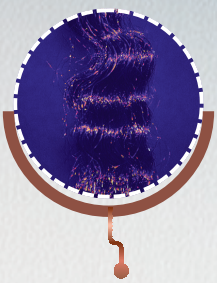


Image acquisition
Use of polarized light



ML model training
Detection of shine areas



Automated measurement
Shine intensity quantification



Model validation

SHINE IN CURLY HAIR

Curly and coily hair (types 3A to 4C) present unique structural properties, such as a helical shape, which make shine measurement challenging using traditional methods.

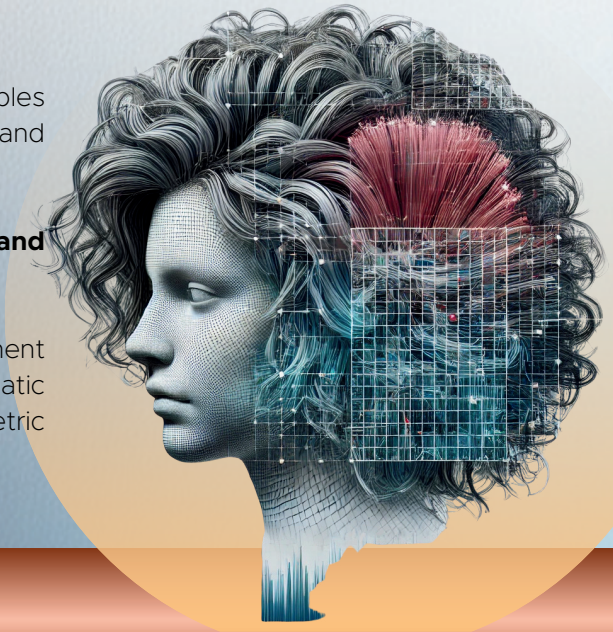
- Objective Measurement: Through a supervised Machine Learning model using polarized illumination and isolation of the shine channel, the system is trained to detect shine areas directly in digital hair images, enabling reproducible detection and quantification of light reflection.
- Perceptual Sensitivity: The model was validated against human perception, demonstrating a high correlation with visual assessment.
- Real Performance:This tool enables the detection of subtle variations produced by cosmetic treatments, such as shampoos and conditioners, on the surface of the hair fiber.

Hair Volume

The use of supervised learning models in volume analysis enables precise and automated evaluation through the detection and segmentation of hair fibers.

Applicability: The method is effective across all hair types and curl patterns.

Statistical Reliability: The analyses demonstrate high agreement with conventional methods, without significant systematic differences, making it a reliable alternative for practical volumetric analysis.



ADVANCED EYELASH ANALYSIS USING ARTIFICIAL INTELLIGENCE

Eyelashes present an extremely fine and delicate structure, with high natural variability among individuals, making their evaluation particularly challenging.

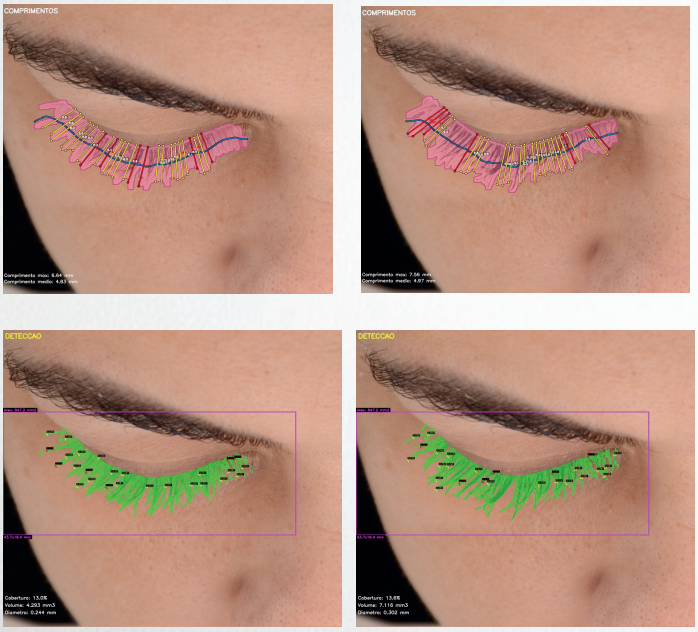
Objective Measurement
Through an advanced Artificial Intelligence-based system, images are automatically analyzed, enabling precise identification of eyelashes and quantification of parameters such as length, thickness, coverage, and apparent volume in a standardized and reproducible manner.

Segmentation Technology
The system performs individual segmentation of each hair strand and automated ocular detection.

Comprehensive Analysis
The tool measures length (from base to tip), average diameter (through multiple measurements), and total volume.

Scientific Support
The objectivity of the generated data provides a solid foundation for claim substantiation.

Real Results – Before and After



Copyright © 2026 Kosmoscience. All rights reserved.
This document may not be reproduced, in whole or in part, by any means or process, nor disclosed through any electronic medium, without prior authorization from Kosmoscience.