LatentView
Actionable Insights • Accurate Decisions

CASE STUDY

Accelerating Drug Discovery with AI-powered Image Analytics for a Leading Medical Equipment Manufacturer



Industry: **Healthcare and Life Sciences** | Domain: **Drug Discovery and Image Analytics**

THE IMPACT

85% REDUCTION IN IMAGE ANALYSIS TIME

100x IMPROVEMENT IN MODEL PROCESSING PERFORMANCE

CLIENT

A leading medical equipment manufacturer.

CHALLENGES

Our client struggled to analyze thousands of microscopic images efficiently due to manual review and inconsistent cell shapes, resulting in error-prone analysis, limited scalability, and slower drug safety evaluation.

The LatentView Approach

We built a **deep learning model** to run quantitative and qualitative analysis of image tests, modeling morphological changes and drug response.

HERE'S WHAT WE DID

- **Designed a new approach** for the client to address the issue of noisy labels.
- **Built a high-performance AI simulation** to study how artificial noise affects the model's generalization capability.
- **Applied advanced ML techniques** to quantitatively assess growth-related features within the deep learning model.
- **Developed an advanced interface** for model diagnosis.
- **Enhanced the existing codebase** by incorporating modularization, advanced concurrency control, code optimization and large-scale parallelization.



BUSINESS OUTCOMES

85%
reduction in image analysis time, removing the manual review bottleneck.

100x
faster processing, cutting data and model generation time by 50%.

Faster,
more consistent evaluation of drug response across biological image tests.

Enhance your drug discovery outcomes with AI-powered image analytics.

LET'S TALK →

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