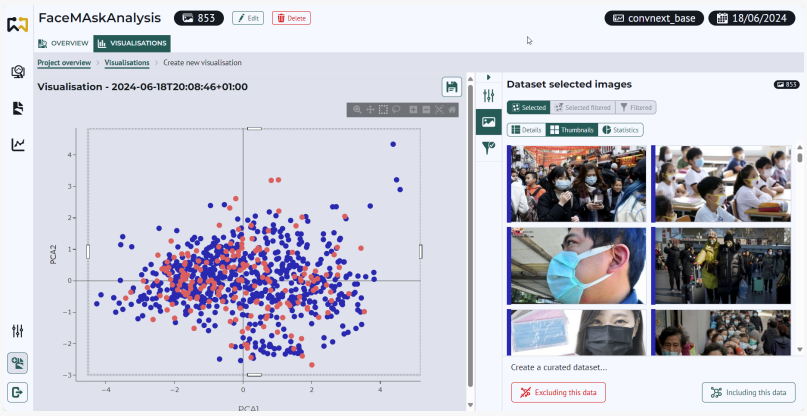
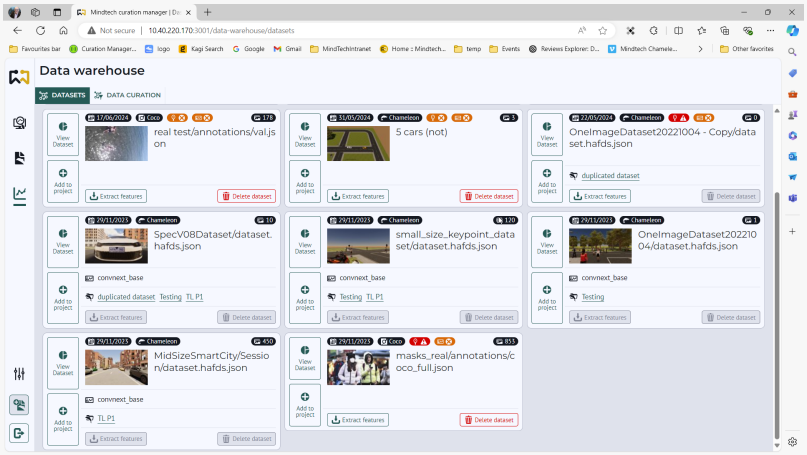
Mindtech launches transformative upgrade to Training Data Analysis and Curation platform

The new release of Dolphin gives deeper Vision AI dataset understanding, and is core to a datacentric approach to MLOps



The Mindtech Dolphin Platform showing processed images



Mindtech Dolphin

SHEFFIELD, UK, June 19, 2024 /EINPresswire.com/ -- Mindtech has today announced the immediate availability of the latest release of their Dolphin platform, which performs Training Data Analysis, Visualization and Curation of image datasets, targeting AI based computer vision.

The new release enables data scientists to get an improved understanding of their training datasets through custom network fit analysis and full annotation visualizations. It gives ML engineers a deep understanding of their training datasets through appearance and content analysis which is critical to enable more accurate and robust AI systems.

The new custom network fit analysis capability allows Data Scientists to specify a custom classification network such as Yolo and determine precisely how a specific image (whether real or synthetic) will be viewed by the network, when compared with other images in any analyzed dataset. Dolphin examines the internal embeddings of the network, that are usually hidden inside “the blackbox”, automatically identifies the most relevant of hundreds of values per image through Principal Component Analysis (PCA) and creates an easy to interpret, human readable 2D chart.

This analysis allows the engineers to rapidly understand dataset shortcomings, for example sparsity and diversity issues. These are important to identify and resolve to ensure network

robustness when deployed in the real world. A second important area is Data-Drift. This is where the original training data becomes no longer relevant, or new training data is required due to changing real world conditions. Data-Drift can be identified without requiring labeling of new data.

The second key enhancement is the visualization of annotations from within the platform. This enables engineers to rapidly look at chosen images, such as outliers, and examine and verify the associated annotations Dolphin is fully containerized, allowing for easy install on premise or in the cloud, with easy user access from any supported browser. Dolphin is part of the Mindtech DataOps platform, and the actionable intelligence created by Dolphin can be used in Mindtech's Synthetic Data Creation Platform, Chameleon, to enable the simple and rapid creation of synthetic data to improve training data coverage and therefore AI model performance.

Says Chris Longstaff, VP of Product Management at Mindtech "As we enter an era where AI based systems are under ever closer scrutiny due to societal and governmental pressure, an understanding of system robustness is more important than ever. With the introduction of legislation such as the EU AI Act and the Colorado Artificial Intelligence Act, the onus is on the technology providers to show that they have full data governance and transparency, Mindtech Dolphin platform can be a key part to meeting these requirements, helping to identify bias, diversity and sparsity of data"

Mindtech will be attending CVPR Expo in Seattle June 19th-21st , on stand 2039 where the platform will be demonstrated.

About Mindtech
Mindtech Global is the developer of intelligently engineered synthetic data, enabling better AI models through data analysis, visualisation and curation. Mindtechs Data Ops Platform delivers a step change in the way AI vision systems are trained, helping computers understand and predict human interactions in applications ranging across retail, smart home, healthcare and smart cities.

Mindtech is headquartered in the UK and is funded by investors including Mercia, Deeptech Labs, In-Q-Tel , Appen and Edge Interviews, media images and demos are available on request.
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