

SkinVision heeft een pilot gedraaid met Polteq iQ®, de nieuwe, door Polteq ontwikkelde geautomatiseerde aanpak voor het testen van complexe Artificial Intelligence systemen. SkinVision biedt een veilige, klinisch gevalideerde medische app aan voor het controleren van verdachte plekken op de huid.

Lees hieronder hoe SkinVision de ervaring met Polteq iQ® beschrijft.

SkinVision pilots Polteq iQ®: Automated Data-driven Robustness testing approach for complex AI systems

SkinVision is the leading provider for the early detection of skin cancer using mobile devices. With over 1.2 million users in 50+ countries worldwide, SkinVision is fighting skin cancer on a global scale. Their mobile app is capable of detecting signs of melanoma, squamous cell carcinoma, basal cell carcinoma, as well as precancerous lesions. So far, SkinVision has helped in the discovery of over 40,000 skin cancer cases globally.

Learning algorithm

SkinVision is the manufacturer of a mobile medical device that is distributed as a downloadable app for consumers on iOS and Android platforms. At the core of the service is a deep learning algorithm that is used to classify photos acquired through the proprietary camera software in the mobile applications and provides recommendations on next steps to take. SkinVision's technology is created to work on real-world consumer devices in real-life usage scenarios covering many different makes and models of mobile devices, skin and lighting conditions.

SkinVision has partnered with Polteq to pilot the usage of Polteq iQ®, the new structured and automated approach for testing complex systems in determining the effect of color temperature variations on assessment accuracy. Given the statistical nature of deep learning systems, traditional a-priori test approaches may not be adequate to sufficiently demonstrate such a system's performance. Using the structured and automated approach, Polteq was able to process large numbers of synthetic data to show the robustness of SkinVision's assessment algorithm.

Three day assessment

During the three day assessment, Polteq performed analysis of the business requirements, set up a test strategy and test bench by connecting the Polteq tooling to an isolated version of the SkinVision API, executing tests and collecting metrics and finally reporting and discussing these with the SkinVision team.

Polteq's experience in the pilot underlined the need for structured, automated and data-driven approaches for the evaluation of complex deep learning systems, especially when used in real-life scenarios, validating the approach SkinVision is taking.

[Lees meer over Polteq iQ® - testen van AI en Machine Learning](#)