

Object Segmentation



Quick Summary

With the integration of object segmentation techniques in our clients' systems, they were able to effectively detect, isolate, track, classify and analyze objects from images and videos for various applications. This potent technology dramatically enhanced their operational efficiency, improved analyses, and allowed them to make more data-driven decisions.

The Tech Stack

- **Python** for image processing.
- **Keras** for deep learning models.
- **AWS** for model deployment.
- **Power BI** dashboards for analytics.

Ready to Start?

We understand that integrating a new technology comes with its uncertainties. We offer an engagement model that requires a minimal, fully refundable deposit to mitigate risk. If any critical issues arise, you can rest assured knowing we will refund your deposit. Furthermore, if the project progresses beyond the Proof-of-Concept stage, we will apply the deposit to the overall project cost.

The Problem

Many businesses across several sectors, including Retail, Medical, and Machine Vision, were being held back by the inability to accurately identify, track, and analyze specific objects within images and videos. They were unable to optimize their operations due to limited capabilities in object isolation and classification, which ultimately resulted in lower productivity and profitability.

The Solution

By introducing object segmentation techniques, we were able to help our clients overcome these challenges. This involved the application of advanced methods to isolate, detect, track and classify objects in images and videos, enabling precise selections in image and video editing, accurate retail shelf analyses and optimization, efficient diagnosis through medical imaging, and effective image preprocessing for machine vision. The technologies used included Python for image processing, Keras for deep learning models, AWS for deployment, and Power BI for data analysis.

The Outcomes

Post the integration of object segmentation techniques, our clients witnessed significant improvements:

- ✦ Enhanced accuracy in image and video editing by precisely isolating specific objects
- 👍 Optimization of retail shelves, resulting in improved product visibility and increased sales
- ☰ More accurate and efficient medical diagnoses due to the better identification and isolation of organs, tumors, and other structures of interest
- 🔄 Improvement in machine vision as a result of efficient image preprocessing
- Overall enhancement in operational efficiency and profitability