

Big 4 Image Segmentation Roadblocks for Developers



Technically, image segmentation with ML solves problems smoothly, but teams building segmentation apps in real life run into several roadblocks that disrupt the workflow, challenge your team, and hinder the data labeling process.

Don't let inefficiencies kill projects!



Roadblock #1

Lack of proper data, insufficient data quality, and noisy data

What Tobias says: "Garbage in, garbage out." Without sufficient

accurate training data representative of your business use case, your models will never perform well. What teams underestimate: 80% of the time spent is on data curation and preparation and not the actual model development.



Human-in-the-loop integration

Roadblock #2

While automation tackles simpler tasks,

What Tobias says:

humans remain vital for complex cases. Here, prioritize "quality over quantity." Invest in welltrained annotators and rigorous performance management to guarantee high-quality data.



Machine learning model interpretability

Roadblock #3

What Tobias says:

ML models are a black box and you need to work closely with the models and the data to

Confident Learning, Active Learning, or Saliency Maps, to identify and understand edge cases and course correct.

understand their behavior. Use tools like



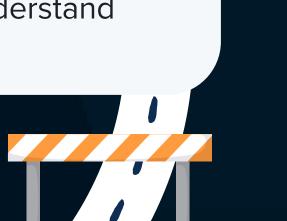
Roadblock #4

by monitoring performance, identifying edge cases, and retraining models, ensuring ongoing accuracy.

constant vigilance. A continuous improvement

pipeline can proactively address concept drift

Monitor models post-deployment



Data quality & noise CloudFactory offers manual, semi-automated, and

with Accelerated Annotation

Human-in-the-loop Experienced, well-trained human annotators are integrated with Al-powered automation for superior data

automated tools to create high-quality, clean training data



Model interpretability Accelerated Annotation leverages ML techniques such as

for segmentation tasks.

quality.

to automatically identify edge cases for human review and provide advanced data insights. Mitigate model, concept, and data drift

CloudFactory's data flywheel approach facilitates

Confident Learning, Active Learning, and Saliency Maps



adaptation to changing data patterns, mitigating the impact of concept drift.

Meet Tobias Schaffrath Rosario

Tobias is an Al Solutions Consultant at

CloudFactory, connecting our tech to our

teams turn Al ideas into real-life projects and is sharing his experience from dozens of projects to increase the number of Al projects that make it to production.

client's needs. He is passionate about helping

