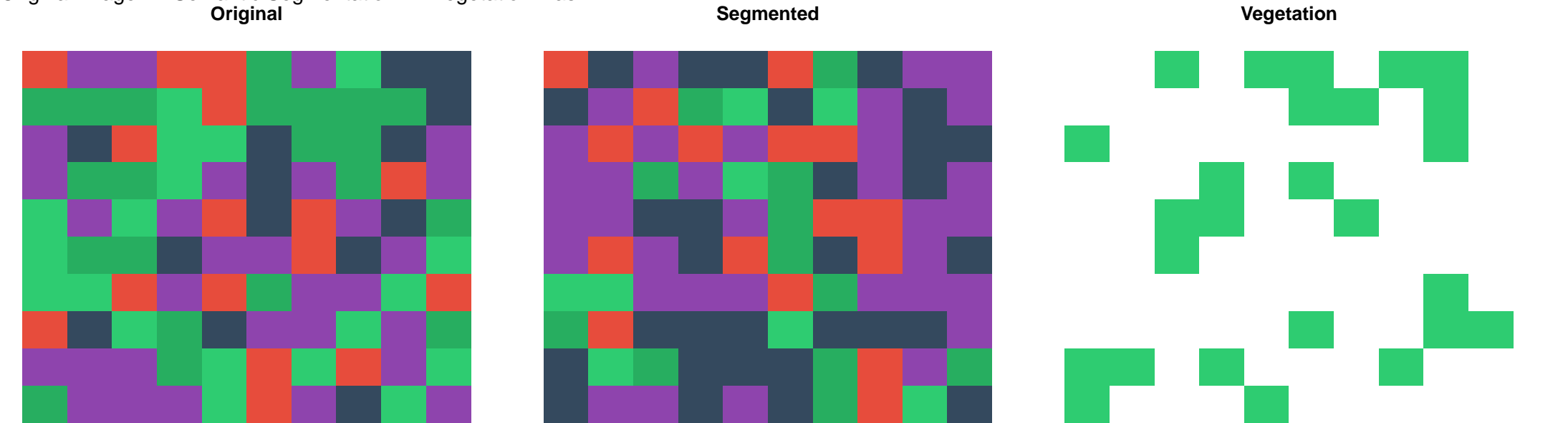# Figure 3.4: Semantic Segmentation Pipeline for GVI Calculation

Processing workflow from street–view imagery to LSOA–level Green View Index

Processing Example

Original Image –> Semantic Segmentation –> Vegetation Mask

Original	Segmented	Vegetation

Key Performance Metrics

Model	Accuracy	Classes	Speed
SegFormer–b0	89.3%	8 vegetation	~0.5s/image

GVI Calculation Formula:

$$GVI = \frac{\sum \text{Vegetation Pixels}}{\sum \text{Total Pixels}} \times 100$$

Aggregation: Weighted mean across all LSOA images

SegFormer–b0 model trained on ADE20K dataset, processing 138,000+ images across Inner London