



SAGE: Sequential Attribute Generator for Analyzing Glioblastomas Using Limited Dataset

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Problem

- Generative models that can handle limited, imbalanced and diverse datasets
- Learn complex data distribution to generate realistic brain tumor images

Approach

- Sequential Attribute GEnerator (SAGE)
- Disentangles significant features of a tumor and sequentially regenerates to generate realistic, high resolution and diverse tumors

Contributions

- Generate diverse, high quality images from very limited training set
- Added control over synthetic tumor images
- Extensive analysis of generated images in recreating visually unapparent features

