

BrainPainter: A software for the visualisation of brain structures, biomarkers and associated pathological processes

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Abstract

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1. Introduction

Visualisation of brain structure, function and pathology is crucial for understanding the mechanisms underlying certain neurodegenerative diseases. For example, Alzheimer's disease, one of the most common neurodegenerative diseases that affect more than 50 million people worldwide, is characterised by a complex progression of pathology characterised by amyloid and tau deposition, neurodegeneration and cognitive decline Jack Jr et al. (2010).

Several tools are currently available for brain visualisation ...

We present BrainPainter, a software for easy visualisation of structures, pathology and biomarkers in the brain. As opposed to previous software, it automatically generates images from pre-defined view-points given a set of input numbers for each brain region used to define their color on a pre-defined color scale.

2. Design

BrainPainter works

3. Use case: Show progression of pathology

4. Conclusion

5. Acknowledgements

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