

colorScaleStudyData

September 10, 2019

Title Reader result and Groud Truth for the Color Scale Study

Version 1.0.0

Description The Color Scale Study repository data contains the raw data files with the individual readers answer to each case and the ground truth.
For information about the methods used for this work please refer to:
Zabala-Travers S, Gallas BD, Busoni S, Williams MC, Noferini L, Fedeli L, Lucarini S, Galastrri L, Mirsadraee S, Badano A. Display colour scale effects on diagnostic performance and reader agreement in cardiac CT and prostate apparent diffusion coefficient assessment. Clinical radiology. 2019 Jan 1;74(1):79-e1.
We kindly request you to cite this article if data from this repository is used for your research.

Depends R (>= 3.5.2)

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Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

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cardioCTGroundTruth	<i>Ground Truth for the Cardiac CT study</i>
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Description

This truth data was produced from the color scale study for the Cardiac CT images described in Zabala-Travers S, Gallas BD, Busoni S, Williams MC, Noferini L, Fedeli L, Lucarini S, Galastrri L, Mirsadraee S, Badano A. Display colour scale effects on diagnostic performance and reader agreement in cardiac CT and prostate apparent diffusion coefficient assessment. Clinical radiology. 2019 Jan 1;74(1):79-e1.

The variables are as follows:

Usage

cardioCTGroundTruth

Format

A data frame with 210 rows and 2 variables:

caseID ID for 210 cases, among which 105 positive for lesion (1–209)

truth factor with two levels: positive(with lesion) / negative (without lesion)

References

<https://www.ncbi.nlm.nih.gov/pubmed/30336942>

cardioCTReaderData	<i>Reader study result for the Cardiac CT study</i>
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Description

This reader study result was produced from the color scale study for the Cardiac CT images described in

Zabala-Travers S, Gallas BD, Busoni S, Williams MC, Noferini L, Fedeli L, Lucarini S, Galastri L, Mirsadraee S, Badano A. Display colour scale effects on diagnostic performance and reader agreement in cardiac CT and prostate apparent diffusion coefficient assessment. Clinical radiology. 2019 Jan 1;74(1):79-e1.

The study is not fully crossed. The variables are as follows:

Usage

cardioCTReaderData

Format

A data frame with 1921 rows and 4 variables:

readerID Readers(bservers) had different experience level, which is referenced in the reader nickname as High and Low, for high and low level of experience, respectively. (High1–High4, Low1–Low8)

caseID ID for 210 cases, among which 105 positive for lesion (1–210)

modalityID Three color scales: Grayscale, Rainbow, Hotiron(Hot). Grayscale was evaluated using GSDF settings and Rainbow and Hotiron using RGB settings.

confidenceScore The score gave from the readers (0–100)

References

<https://www.ncbi.nlm.nih.gov/pubmed/30336942>

prostateMRIGroundTruth

Ground Truth for the Prostate MRI study

Description

This truth data was produced from the color scale study for the Prostate MRI images described in *Zabala-Travers S, Gallas BD, Busoni S, Williams MC, Noferini L, Fedeli L, Lucarini S, Galastrri L, Mirsadraee S, Badano A. Display colour scale effects on diagnostic performance and reader agreement in cardiac CT and prostate apparent diffusion coefficient assessment. Clinical radiology. 2019 Jan 1;74(1):79-e1.*

The variables are as follows:

Usage

prostateMRIGroundTruth

Format

A data frame with 165 rows and 2 variables:

caseID ID for 165 cases, among which 66 positive for lesion (1–165)

truth factor with two levels: positive(with lesion) / negative (without lesion)

References

<https://www.ncbi.nlm.nih.gov/pubmed/30336942>

prostateMRIReaderData *Reader study result for the Prostate MRI study*

Description

This reader study result was produced from the color scale study for the Prostate MRI images described in

Zabala-Travers S, Gallas BD, Busoni S, Williams MC, Noferini L, Fedeli L, Lucarini S, Galastrri L, Mirsadraee S, Badano A. Display colour scale effects on diagnostic performance and reader agreement in cardiac CT and prostate apparent diffusion coefficient assessment. Clinical radiology. 2019 Jan 1;74(1):79-e1.

The study is not fully crossed. The variables are as follows:

Usage

prostateMRIReaderData

Format

A data frame with 2035 rows and 4 variables:

readerID Readers(observers) had different experience level, which is referenced in the reader nickname as High, Med and Low, for high, medium and low level of experience, respectively. (High1–High3, Med1–Med3, Low1 –Low3)

caseID ID for 165 cases, among which 66 positive for lesion (1–165)

modalityID Five color scales: Grayscale, Rainbow, Hotiron, Rainbow read with GSDF, Hotiron read with GSDF

confidenceScore The score gave from the readers (0–100)

References

<https://www.ncbi.nlm.nih.gov/pubmed/30336942>

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