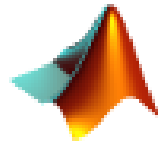


ADAMS

Advanced **D**ata mining **A**nd **M**achine learning **S**ystem

Module: adams-matlab



Peter Reutemann

December 2, 2021

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Chapter 1

Introduction

The *adams-matlab* module provides some basic input/output for binary Matlab .mat files (format 5). The heavy lifting under the hood is done by the Matlab File Library (MFL)[4].

Chapter 2

Flow

The following sources are available:

- *NewMat5File* – creates an empty Mat5File object

The following transformers are available:

- *Mat5FileAddArray* – adds an array (matrix or cell) to a mat file
- *Mat5FileAddMap* – adds the Matlab arrays (of type matrix or cell) from a map to a mat file, using the map keys as entry names
- *Mat5FileInfo* – outputs information on a .mat file
- *Mat5FileReader* – loads a .mat file
- *MatlabStructInfo* – output information on a Matlab Struct object.

The following sinks are available:

- *Mat5FileWriters* – writes .mat files

The following conversions are available:

- *MatlabArrayToSpreadSheet* – converts a (2-dimensional) Matlab array into a spreadsheet
- *MatlabStructToMap* – converts a Matlab struct object into a map
- *SpreadSheetHeaderToMatlabArray* – turns the spreadsheet header (ie the column names) into an array
- *SpreadSheetToMatlabArray* – turns a spreadsheet into an array (matrix or cell)

The following boolean conditions are available:

- *IsMatlabStruct* – checks whether the token contains a Matlab Struct object.

Bibliography

- [1] *ADAMS* – Advanced Data mining and Machine learning System
<https://adams.cms.waikato.ac.nz/>
- [2] *Matlab* – a proprietary multi-paradigm programming language and numeric computing environment developed by MathWorks
<https://www.mathworks.com/products/matlab.html>
- [3] *octave* – software featuring a high-level programming language, primarily intended for numerical computations
<https://gnu.org/software/octave/>
- [4] *MAT File Library* – a Java library for reading and writing MAT Files that are compatible with MATLAB’s MAT-File Format.
<https://github.com/HebiRobotics/MFL>