

Introducing midfieldr

R package midfelddata provides a stratified sample

 **midfelddata** : 98 000 students

students

terms

courses

degrees

Each observation is a unique student

 **midfielddata** : 98 000 students

students

terms

courses

degrees

student ID
institution
term
major
transfer
sex, race, age
us citizen
home zip code
SAT, ACT

midfieldstudents

98,000 observations

19 Mb of memory

Each observation is one term for one student

 **midfielddata** : 98 000 students

students

student ID
institution
term
major
transfer
sex, race, age
us citizen
home zip code
SAT, ACT

terms

student ID
institution
term
major
level
standing
co-op
credit hours
GPA

courses

degrees

midfieldterms

729,000 observations

82 Mb of memory

Each observation is one course for one student

 **midfielddata** : 98 000 students

students

student ID
institution
term
major
transfer
sex, race, age
us citizen
home zip code
SAT, ACT

terms

student ID
institution
term
major
level
standing
co-op
credit hours
GPA

courses

student ID
institution
term
course
--section
--hours
--type
--grade
--instructor

degrees

midfielddata

3.5 M observations

348 Mb of memory

Each observation is a unique student

 **midfielddata** : 98 000 students

students

student ID
institution
term
major
transfer
sex, race, age
us citizen
home zip code
SAT, ACT

terms

student ID
institution
term
major
level
standing
co-op
credit hours
GPA

courses

student ID
institution
term
course
--section
--hours
--type
--grade
--instructor

degrees

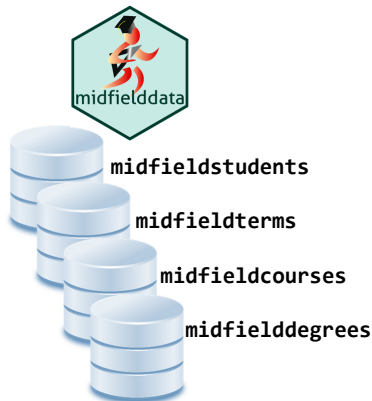
student ID
institution
term
major
degree

midfieldddegrees

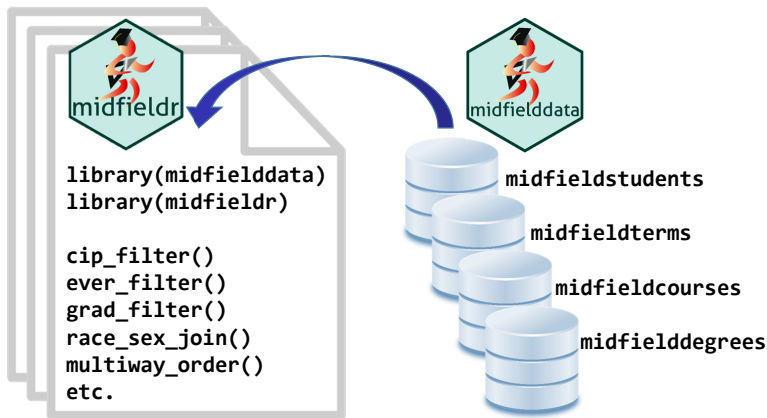
98,000 M observations

10 Mb of memory

midfelddata provides the data



midfieldr provides the tools



Preparing for the workshop, you installed both packages

<https://midfieldr.github.io/midfieldr>

midfieldr

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A package for investigating student record data provided by registrars at US universities participating in the MIDFIELD project.

midfielddata

build passing License CC-0

An R data package containing four data sets:

- `midfieldstudents` Student demographic attributes
- `midfieldcourses` Academic course attributes
- `midfieldterms` Academic term attributes
- `midfielddegrees` Student graduation attributes

midfieldr provides functions for working with midfelddata

Some of those functions you will use today are:

Function	Provides
<code>cip_filter()</code>	Identify programs by CIP code
<code>cip_label()</code>	Label your programs
<code>ever_filter()</code>	Find all students ever enrolled in your programs
<code>grad_filter()</code>	Find all graduates of your programs
<code>race_sex_join()</code>	Join student race/ethnicity and sex to the data
<code>multiway_order()</code>	Order the rows and panels of multiway data