Introduction to R & ActivityInfo

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Presentation outline

- What is R?
- Set up
- Connecting to ActivityInfo
- Retrieving ActivityInfo data with R
- Updating ActivityInfo databases with R
Introduction to R
What is R?

R is an open source programming language and environment for statistical computing.

R has origins in the S language, created in the 1980s at Bell Labs.

The R package repository has over 18,000 packages covering every conceivable domain.
RStudio

RStudio is a user-friendly Integrated Development Environment (IDE) for the R language.
Tidy data and the Tidyverse

The tidyverse is a collection of R packages designed for data science.

All packages share an underlying design philosophy, grammar, and data structures.
Set up
Getting set up

1. Install R (Windows)
2. Install RStudio
Getting set up - packages

install.packages("remotes")
remotes::install_github("bedatadriven/activityinfo-R")
install.packages("tidyverse")
# Go make some coffee :-)

Getting set up - authentication

1. Add a Personal API token
2. activityInfoLogin()
Query ActivityInfo from R
(and a quick intro to R)
Some useful functions from activityinfo-R…

- `getDatabases()`
- `getDatabaseTree(databaseId)`
- `queryTable()`
Bringing data into ActivityInfo
Bringing data into AI

- addRecord()
- updateRecord()
- importTable()
More resources on learning R

- Getting started with data in R
- R for Data Science book
- A Gentle Introduction to Tidy Statistics in R