

Structure of RDS Analyst



A BRIEF TOUR

Why



- Lack of a tool for field researchers that is:
 - Easy to use.
 - Scriptable.
 - Supports the latest methods and diagnostics.

- Bridging the gap between ***statistical researchers*** and ***public health officials***.

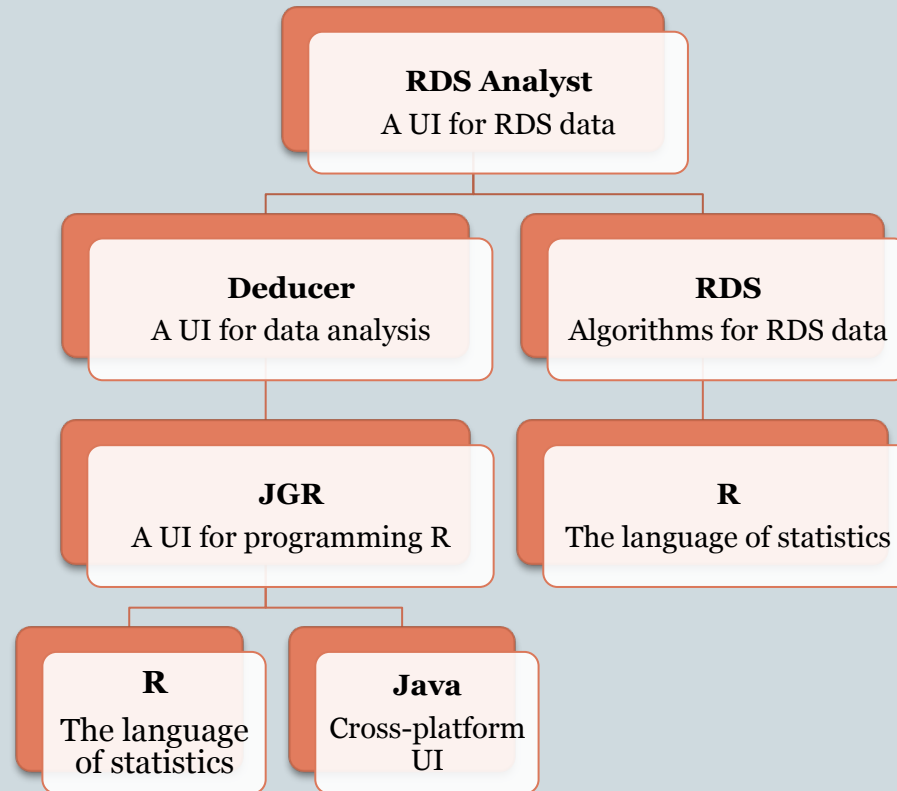
RDSAT

But isn't their already a program?



- Doesn't implement the latest estimation methods (e.g. Gile's SS estimator).
- Doesn't implement the latest diagnostic plots (e.g. Convergence and bottleneck plots).
- Inflexible data import.
- Less than ideal UI design.
- Doesn't speak the same language as statisticians (R).
- No source code available.

The Structure of RDS Analyst



Menu items to import, analyze and manipulate data

```
>  
Loading required package: DeducrRichOutput  
> data(faux)  
> frequencies(faux[c("X","Y")], r.digits = 1)
```

Frequencies

Frequencies (X)

Value	# of Cases	%
1 blue	118	30.30
2 red	271	69.70

Case Summary (X)

	Valid	Missing	Total	%
1	389.00	0.00	389.00	

Analysis output

View and edit data

id	recruiter.id	X	Y	network.size	wave	seed
1	735	0 red	black	16	0	0
2	134	735 blue	black	20	1	1
3	168	735 red	black	17	1	1
4	111	134 blue	black	32	2	2
5	220	134 blue	black	14	2	2
6	307	168 red	green	25	2	2
7	942	168 red	blue	43	2	2
8	627	942 red	green	28	3	3
9	575	942 red	black	11	3	3
10	498	111 red	black	10	3	3
11	886	111 blue	blue	26	3	3
12	414	307 red	green	21	3	3
13	285	307 blue	green	28	3	3
14	285	307 blue	blue	22	3	3
15	285	307 blue	blue	22	3	3
16	285	307 blue	blue	18	4	4
17	285	307 blue	blue	23	4	4
18	285	307 blue	blue	19	4	4
19	916	886 blue	blue	29	4	4
20	35	414 red	green	15	4	4
21	334	414 blue	green	25	4	4
22	182	414 red	black	24	4	4
23	276	414 blue	blue	15	4	4
24	276	414 blue	green	13	4	4
25	276	414 blue	green	39	4	4
26	276	414 blue	blue	26	4	4
27	276	414 blue	blue	17	4	4
28	276	414 blue	black	21	4	4
29	276	414 blue	black	16	4	4
30	6	414 blue	green	15	4	4
31	546	414 red	green	21	4	4
32	43	180 red	green	23	5	5

GUI Design Principles



**SIMPLE DESIGN SHOULD
HIDE COMPLEXITY**

GUI Design Principles



BEAUTIFUL GRAPHICS

GUI Design Principles



DATA = 1/2 * DATA ANALYSIS

GUI Design Principles



INFORMATIVE HELP

GUI Design Principles



**EMBEDDED WITHIN A
LARGER DATA ANALYSIS
FRAMEWORK**