TIDYVERSE Generate Panel Data Structures

Fan Wang

2020-04-14

	_			1 -
U	OI	nt.	en	$\mathbf{t}\mathbf{s}$

Generate Panel Structure

Go to the **RMD**, **R**, **PDF**, or **HTML** version of this file. Go back to fan's REconTools Package, R4Econ Repository (bookdown site), or Intro Stats with R Repository.

Balanced Panel Skeleton There are N individuals, each could be observed M times. In the example below, there are 3 students, each observed over 4 dates. This just uses the uncount function from tidyr.

```
# Define
it_N <- 3
it_M <- 5
svr_id <- 'student_id'
svr_date <- 'class_day'

# dataframe
df_panel_skeleton <- as_tibble(matrix(it_M, nrow=it_N, ncol=1)) %>%
    rowid_to_column(var = svr_id) %>%
    uncount(V1) %>%
    group_by(!!sym(svr_id)) %>% mutate(!!sym(svr_date) := row_number()) %>%
    ungroup()

# Print
kable(df_panel_skeleton) %>%
    kable_styling_fc()
```

$student_id$	class_day
1	1
1	2
1	3
1	4
1	5
2	1
2	2
2	3
2 2 2 2 2 2 2 3 3	4
2	5
3	1
3	2
3	3
3	4
3	5