

## 20180313\_three\_function\_overview

```
references<-references_read()
```

```
authors<-authors_clean(references, sim_score=0.9)
```

At this stage you go through and change any incorrectly grouped authors groupID to their authorID.

This function takes those changes and makes the names all the same, filters again, and makes some small changes and deletes some columns for input to your functions

```
authors_final<-authors_refine(authors, sim_score=0.94)
```

```
#####
```

```
# EB TEST
```

```
#####
```

```
eb_references <- references_read("~/refnet_materials/data/EBpubs.txt", dir=FALSE, filename_root "~/refnet_materials/output/EBpubs")
```

```
eb_authors <- authors_clean(eb_references, filename_root "~/refnet_materials/output/eb")
```

```
eb_refined <- authors_refine(authors=eb_authors$authors, master=eb_authors$master)
```

```
save(eb_refined, file "~/refnet_materials/output/eb_refined.Rdata")
```

```
authors_georef(eb_refined)
```

```
#####
```

```
# LARR
```

```
#####
```

```
LARR_references <- references_read("~/refnet_materials/data/LARR/",  
                                   dir=TRUE,  
                                   filename_root "~/refnet_materials/output/LARR")
```

```
LARR_authors <- authors_clean(LARR_references, filename_root "~/refnet_materials/output/LARR")
```

```
LARR_refined <- authors_refine(authors=LARR_authors$authors, master=LARR_authors$master)
```

```
#####
```

```
# WOS 2018 TEST
```

```
#####
```

```
WOS18_references <- references_read("~/refnet_materials/data/WOS2018/",  
                                   dir=TRUE,  
                                   filename_root "./output/WOS18")
```

```
WOS18_authors <- authors_clean(WOS18_references, filename_root "~/refnet_materials/output/WOS18")
```

```
WOS18_references <- authors_refine(authors=WOS18_authors$authors, master=WOS18_authors$master)
```

```
#####
```

```
# WOS 2011 TEST
```

```
#####

WOS11_references <- references_read("~/refnet_materials/data/WOS2011", dir=TRUE,
                                   filename_root=~ /refnet_materials/output/WOS11")

WOS11_authors <- authors_clean(WOS11_references, filename_root=~ /refnet_materials/output/WOS11")

WOS11_references <- authors_refine(authors=WOS11_authors$authors, master=WOS11_authors$master)

#####
# ECOLOGY TEST
#####

Ecology_references <- references_read("~/refnet_materials/data/Ecology.txt", dir=FALSE, filename_root=~ /refnet_materials/output/Ecology")

Ecology_authors <- authors_clean(Ecology_references, filename_root=~ /refnet_materials/output/Ecology")

Ecology_refined <- authors_refine(authors=Ecology_authors$authors, master=Ecology_authors$master)

save(Ecology_refined, file=~ /refnet_materials/output/Ecology_refined.Rdata")

authors_georef(Ecology_refined)

#####
# BITR TEST
#####

BITR_references <- references_read("~/refnet_materials/data/BITR", dir=TRUE, filename_root=~ /refnet_ma

BITR_authors <- authors_clean(BITR_references, filename_root=~ /refnet_materials/output/BITR")

BITR_refined <- authors_refine(authors=BITR_authors$authors, master=BITR_authors$master)

save(BITR_refined, file=~ /refnet_materials/output/BITR_refined.Rdata")

authors_georef(BITR_refined)

load("~/refnet_materials/output/eb_refined.Rdata")

dat <- separate(data=eb_refined, col = address,
               into=c("university", "department", "short_address"),
               sep=",", extra = "merge", remove=FALSE) %>%
mutate(country=stri_extract_last_words(short_address),
       zip = str_extract(string=short_address,
                        pattern="[:digit:][:digit:][:digit:][:digit:][:digit:]"),
       city_state = str_extract(string=short_address,
                                pattern="[:alnum:]{1,20}[ ,][ ] [A-Z] [A-Z]") ) %>%
select(address, short_address, city_state, zip, country, university, department)

#write.csv(dat, file = "dat_parsed_addresses.csv")
```

```
head(dat[,c("address")])
```

```
## [1] Univ Florida, Dept Wildlife Ecol & Conservat, Gainesville, FL 32611 USA.  
## [2] Univ Fed Pernambuco, Dept Bot, BR-50372970 Recife, PE, Brazil.  
## [3] Univ Fed Pernambuco, Dept Bot, BR-50372970 Recife, PE, Brazil.  
## [4] Univ Fed Pernambuco, Dept Bot, BR-50372970 Recife, PE, Brazil.  
## [5] Univ Fed Pernambuco, Programa Posgrad Biol Vegetal, BR-50372970 Recife, PE, Brazil.  
## [6] Univ Fed Pernambuco, Dept Bot, BR-50372970 Recife, PE, Brazil.  
## 94 Levels: Univ Fed Pernambuco, Dept Bot, BR-50372970 Recife, PE, Brazil. ...
```

```
head(dat[,c("university", "department")])
```

	university	department
## 1	Univ Florida	Dept Wildlife Ecol & Conservat
## 2	Univ Fed Pernambuco	Dept Bot
## 3	Univ Fed Pernambuco	Dept Bot
## 4	Univ Fed Pernambuco	Dept Bot
## 5	Univ Fed Pernambuco	Programa Posgrad Biol Vegetal
## 6	Univ Fed Pernambuco	Dept Bot

```
head(dat[,c("short_address", "city_state", "zip", "country")])
```

	short_address	city_state	zip	country
## 1	Gainesville, FL 32611 USA.	Gainesville, FL 32611		USA
## 2	BR-50372970 Recife, PE, Brazil.	Recife, PE 50372		Brazil
## 3	BR-50372970 Recife, PE, Brazil.	Recife, PE 50372		Brazil
## 4	BR-50372970 Recife, PE, Brazil.	Recife, PE 50372		Brazil
## 5	BR-50372970 Recife, PE, Brazil.	Recife, PE 50372		Brazil
## 6	BR-50372970 Recife, PE, Brazil.	Recife, PE 50372		Brazil