

# Tech Graduate Case

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## Henting av data

Data er hentet fra ssb.no ved hjelp av JSON-spørringer. Dataene inneholder informasjon om anmeldte lovbrudd, sortert etter lovbruddstype og gjerningssted.

```
library(httr)
library(rjstat)

url <- "https://data.ssb.no/api/v0/en/table/08486"

query <- '
{"query":[{"code":"Gjerningssted","selection":{"filter":"item","values":
["01-97","03","30","34","38","42","11","46","15","50","18","54","21","97"]}},
{"code":"LovbruddKrim","selection":{"filter":"vs:LovGruppeKrimA","values":
["1AAAAA-9ZZZZz","1AAAAA-1ZZZZz","2AAAAA-2ZZZZz","3AAAAA-3ZZZZz","4AAAAA-4ZZZZz",
"5AAAAA-5ZZZZz","6AAAAA-6ZZZZz","7AAAAA-7ZZZZz","8AAAAA-8ZZZZz","9AAAAA-9ZZZZz"]}},
{"code":"ContentsCode","selection":{"filter":"item","values":["AnmeldteLovbrudd"]}},
{"code":"Tid","selection":{"filter":"item","values":["2002","2003","2004","2005","2006",
"2007","2008","2009","2010","2011","2012","2013","2014","2015","2016","2017",
"2018","2019","2020"]}}],"response":{"format":"json-stat2"}}
'

response <- POST(url, body = query, encode = "json", verbose())

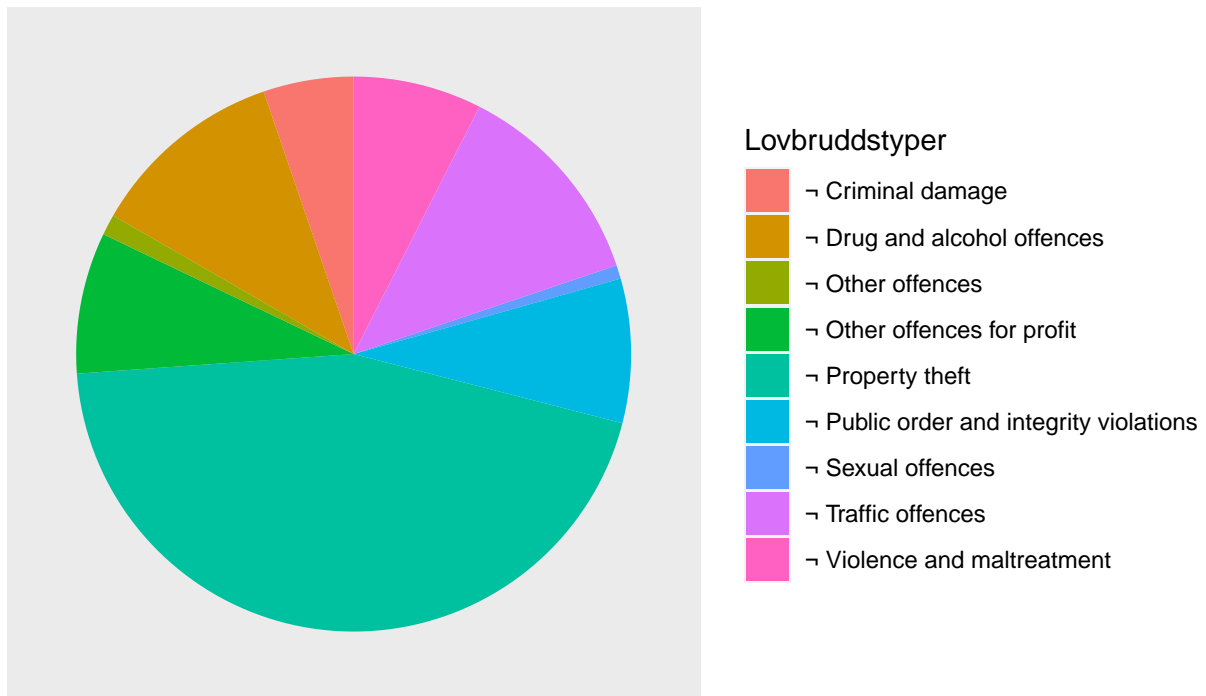
data <- fromJSONstat(content(response, "text"))
```

# Lovbruddsgrupper i 2003

Diagrammet viser andelen rapporterte lovbrudd innenfor hver lovbruddstype. Tallene er på landsbasis.

```
## Error : 'format_warning' is not an exported object from 'namespace:cli'
```

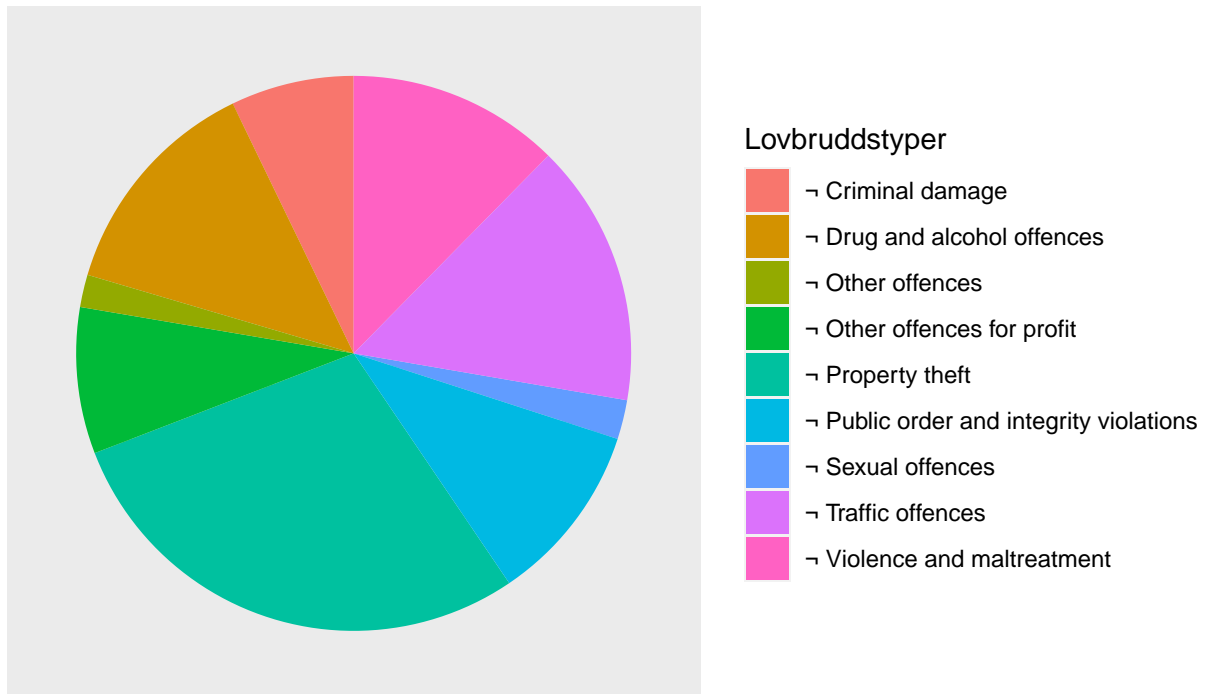
Diagram 1



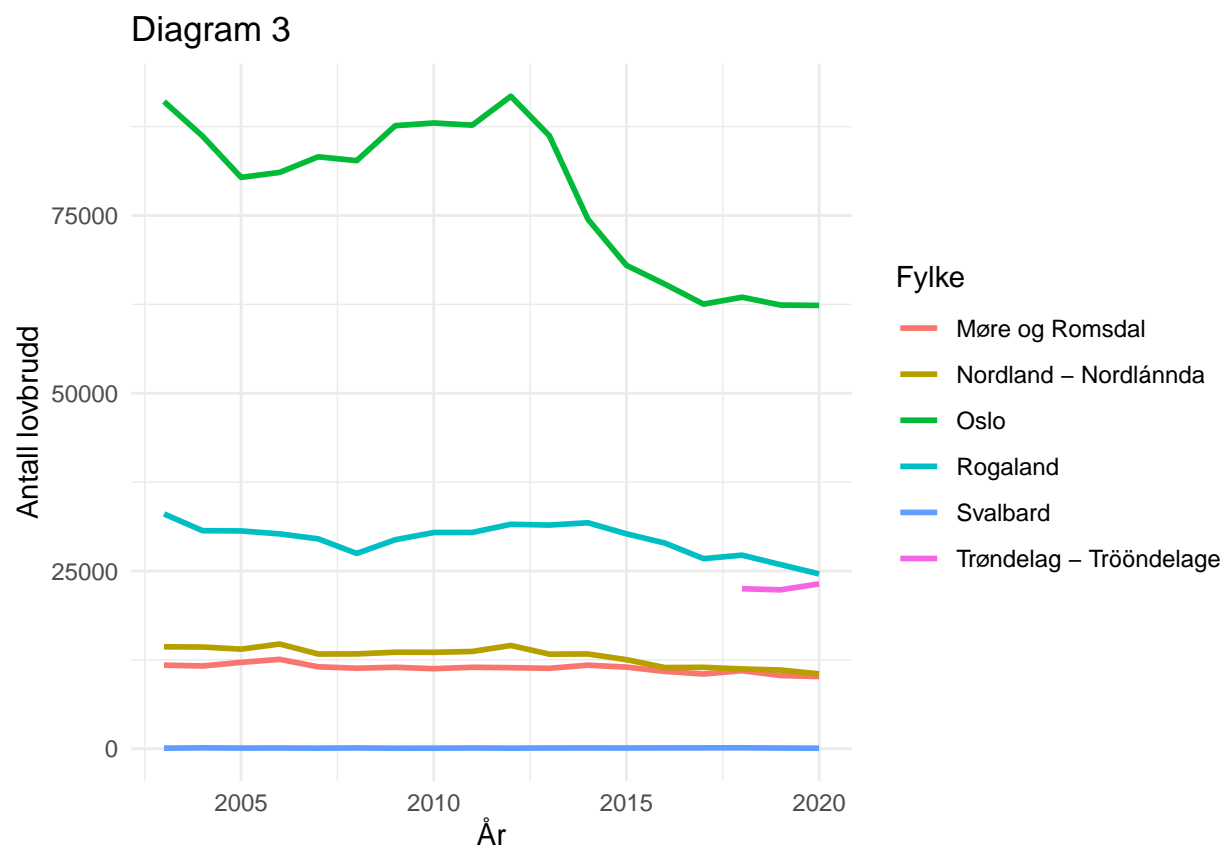
## Lovbruddsgrupper i 2020

Diagrammet viser andelen rapporterte lovbrudd innenfor hver lovbruddstype. Tallene er på landsbasis.

Diagram 2



## Utviklingen av antall lovbrudd per fylke



# Appendix

## Diagram 1

```
data <- data %>%
  select(-contents) %>%
  filter(is.na(value) == FALSE)

norge <- data %>%
  filter('scene of crime' == "The whole country") %>%
  filter(!'type of offence' %in% c("All groups of offences")) %>%
  filter(year == "2003")

norge_plot <- ggplot(norge, aes(x="", y=value, fill='type of offence')) +
  geom_bar(width = 1, stat = "identity") +
  coord_polar("y", start=0) +
  ggtitle("Diagram 1") +
  labs(fill="Lovbruddstyper") +
  theme(axis.title.x = element_blank(),
        axis.title.y = element_blank(),
        panel.border = element_blank(),
        panel.grid=element_blank(),
        axis.ticks = element_blank(),
        axis.text.x=element_blank())

norge_plot
```

## Diagram 2

```
norge <- data %>%
  filter('scene of crime' == "The whole country") %>%
  filter(!'type of offence' %in% c("All groups of offences")) %>%
  filter(year == "2020")

norge_plot <- ggplot(norge, aes(x="", y=value, fill='type of offence')) +
  geom_bar(width = 1, stat = "identity") +
  coord_polar("y", start=0) +
  ggtitle("Diagram 2") +
  labs(fill="Lovbruddstyper") +
  theme(axis.title.x = element_blank(),
        axis.title.y = element_blank(),
        panel.border = element_blank(),
        panel.grid=element_blank(),
        axis.ticks = element_blank(),
        axis.text.x=element_blank())

norge_plot
```

### Diagram 3

```
total <- data %>%
  filter('type of offence' == "All groups of offences") %>%
  filter(!'scene of crime' %in% c("Norway, unknown county", "The whole country", "Agder",
    "Innlandet", "Troms og Finnmark - Romsa ja Finnmark",
    "Vestfold og Telemark", "Vestland", "Viken"))

total$year <- as.numeric(total$year)

plot <- ggplot(total, aes(x = year, y = value)) +
  geom_line(aes(color = 'scene of crime', size = 1)) +
  ggtitle("Diagram 3") +
  labs(y="Antall lovbrudd", x="År", color="Fylke") +
  theme_minimal()

plot
```