

Toronto Apartment Evaluations*

Subtitle Here

Ritvik Puri

03 February 2022

Abstract

First sentence. Second sentence. Third sentence. Fourth sentence.

1 Introduction

The city of Toronto introduced a new bylaw enforcement program in July 2017 that is used to ensure that the apartment building owners and operators comply with the necessary building maintenance standards, known as RentSafeTO. These standards are applied to all apartment buildings with 10 or more units or with 3 or more stories.

Owners of such apartments are required to register with RentSafeTO as well as maintain the standards defined by this program. Tenants need to contact their respective landlord in case they face an issue. These issues could either be vital, such as heat or hydro fault, or service requests, such as window flaws or common area cleaning. If the landlord does not comply to these requests, then according to the bylaws of RentSafeTO program, legal action can be taken against them.

Each property that falls under the program gets inspected by an officer and receives an evaluation score, which is made available to not only the landlord and tenant, but also to the potential tenants. If the score of a building is 86 or above, it will be evaluated again in the next three years. If it is between 66 and 85, it will be evaluated again within two years. If it is between 51 and 65, it will be evaluated again within a year. If a building gets a score of 50 or below, then the full building will undergo a comprehensive inspection.

Home safety evaluations are necessary to protect residents from potential hazards which may lead to personal injury if left unchecked. In a city like Toronto, where a lot of people do not own their personal property and live in rented apartments, it is critical that the landlord is kept informed of their building's condition so that they can ensure a tenant's safety.

*Code and data are available at: www.github.com/ritvikpuri/sta304-paper-1

2 Data

```
3 {r bills, fig.cap="Bills of penguins", echo = FALSE} #
  ggplot(penguins, aes(x = island, fill = species)) + # geom_bar(alpha
    = 0.8) + # scale_fill_manual(values = c("darkorange","purple","cyan")
    # guide = FALSE) + # theme_minimal()
    + # facet_wrap(~species, ncol = 1) + # coord_flip() #
```

```
package <- show_package("4ef82789-e038-44ef-a478-a8f3590c3eb1")
package
```

```
## # A tibble: 1 x 11
##   title      id      topics civic_issues publisher excerpt dataset_category
##   <chr>      <chr>    <chr>  <chr>      <chr>    <chr>    <chr>
## 1 Apartment ~ 4ef82789-e~ <NA>  <NA>      <NA>    <NA>    <NA>
## # ... with 4 more variables: num_resources <int>, formats <chr>,
## #   refresh_rate <chr>, last_refreshed <date>
```

```
# get all resources for this package
```

```
resources <- list_package_resources("4ef82789-e038-44ef-a478-a8f3590c3eb1")
```

```
# identify datastore resources; by default, Toronto Open Data sets datastore resource format to CSV for
datastore_resources <- filter(resources, tolower(format) %in% c('csv', 'geojson'))
```

```
# load the first datastore resource as a sample
```

```
data <- filter(datastore_resources, row_number()==1) %>% get_resource()
```

```
view(data)
```

Talk more about it.

Also bills and their average (Figure ??). (Notice how you can change the height and width so they don't take the whole page?)

Talk way more about it.

4 Model

$$Pr(\theta|y) = \frac{Pr(y|\theta)Pr(\theta)}{Pr(y)} \quad (1)$$

Equation (1) seems useful, eh?

Here's a dumb example of how to use some references: In paper we run our analysis in R (R Core Team 2020). We also use the `tidyverse` which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ .

5 Results

6 Discussion

6.1 First discussion point

If my paper were 10 pages, then should be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

6.2 Second discussion point

6.3 Third discussion point

6.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

- Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean “Lahman” Baseball Database*. <https://CRAN.R-project.org/package=Lahman>.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Golemund, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.