

Quiz13- MA478

Clark

Consider the Chicago burglary dataset available at:

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.3      v readr      2.1.4
## v forcats    1.0.0      v stringr   1.5.0
## v ggplot2    3.4.3      v tibble    3.2.1
## v lubridate  1.9.3      v tidyr     1.3.0
## v purrr      1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

Chi_dat <- read.csv("https://raw.githubusercontent.com/nick3703/Chicago-Data/master/crime.csv")
```

Sum the data over all spatial locations so you have a single observation for each month. Fit an intercept only model to this dataset with an independent error structure, a compound symmetry error, and an AR(1) error structure. Write out the most appropriate model and provide parameter estimates.