# MLaE proposal

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2023-04-11

#### Research Interest

- We wanted to know if WFH workers sleep less, and if so, what factors
- Under the pandemic, although there are many inconveniences, working from home undoubtedly saves workers' commuting time.
- And if working from home becomes a common measure, the choice of housing location for workers does not need to be very close to the city center, this helps reduce inequality between regions.
- ► The current known disadvantages of working from home are: less face-to-face social time, less exposure to sunlight.
  - These factors may all contribute to poorer sleep among home workers.

## Data Source

IPUMS Time Use 2015~2021

## Potential problem

### We have only sleep time data

▶ We have no data to measure sleep quality, only sleep time.

#### Solutions

- use repeated cross-sectional data.
- ► The changes in the sleep time of the experimental group and the control group were tracked through time-series data.

### Model

Consider the following two model

$$D_i = f(state_i, ind_i, Occ_i, age_i) + u_i$$

$$SleepTime_i = D_i + Married_i + Inc_i + Sex_i + NumChildren_i + \epsilon_i$$

Where  $D_i$  is a binary variable,  $D_i = 1$  if i works from home,  $D_i = 0$  o.w.