01-instances-study.Rmd

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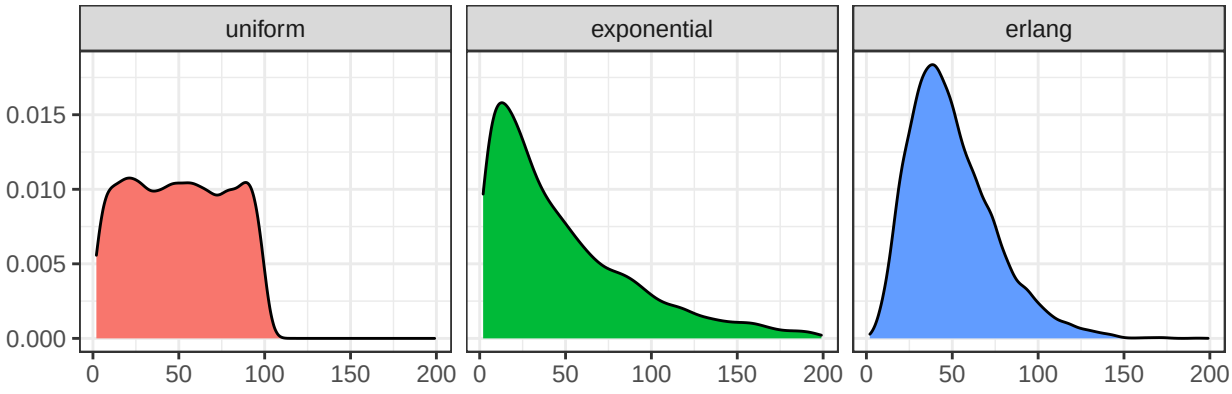
```
load_instance_data <- function(file_path) {
  info <- instance_data_from_filename(last(str_split(file_path, '/')[[1]]))
  lines <- readLines(file_path)
  no_jobs <- as.integer(lines[1])
  no_machines <- as.integer(lines[2])
  seed <- as.integer(lines[3])
  pts <- lines[seq(6, length(lines), 3)] %>%
    str_split(' ') %>%
    map(as.integer) %>%
    unlist() %>%
    matrix(nrow = no_machines, ncol = no_jobs) %>%
    t()
}

all_instances <- instances_attrs_df(LARGE_INSTANCES_ATTRS)
```

```
set.seed(654)
no_samples <- 200
no_samples2 <- 40
tibble(
  Distribution = factor(c(rep('uniform', no_samples*no_samples2),
                  rep('erlang', no_samples*no_samples2),
                  rep('exponential', no_samples*no_samples2)),
                  levels = c('uniform', 'exponential', 'erlang')),
  dt = c(
    as.integer(generate_test_instance(no_samples, no_samples2, 'taill-like', corr = 'rand', corv = 0)),
    as.integer(generate_test_instance(no_samples, no_samples2, 'erlang', corr = 'rand', corv = 0)),
    as.integer(generate_test_instance(no_samples, no_samples2, 'exponential', corr = 'rand', corv = 0))
  )
) %>%

  filter(dt > 1, dt < 200) %>%
  ggplot() +
  facet_wrap(~Distribution) +
  geom_density(aes(x = dt, fill = Distribution)) +
  custom_theme +
  theme(legend.position = 'none',
        axis.title.x = element_blank(),
        axis.title.y = element_blank())
```


uniform
exponential
erlang
0.015
0.010
0.005
0.000
0
50
100
150
200