---

title: 'Decoding Analysis'

output: pdf_document

```
binned_file_name <-'/student/15/xf15/GitHub/shinyNDTr/data/binned/ZD_150_samples_binned_every_10_samples

variable_to_decode <-'combined_ID_position'

num_cv_splits <- 5

ds <- NDTr::basic_DS$new(binned_file_name, variable_to_decode, num_cv_splits)

ds$num_repeats_per_level_per_cv_split <- 2

cl <- NDTr::max_correlation_CL$new()

fps <- list()

cv <- NDTr::standard_CV$new(ds, cl, fps)

DECODING_RESULTS <- cv$run_decoding()
```

```
## [1] 1
## 24.619 sec elapsed
## [1] 2
## 25.83 sec elapsed
## [1] 3
## 26.27 sec elapsed
## [1] 4
## 25.78 sec elapsed
## [1] 5
## 25.318 sec elapsed
```

```
save('DECODING_RESULTS', file = '/student/15/xf15/GitHub/shinyNDTr/results/rmd.rda')
```

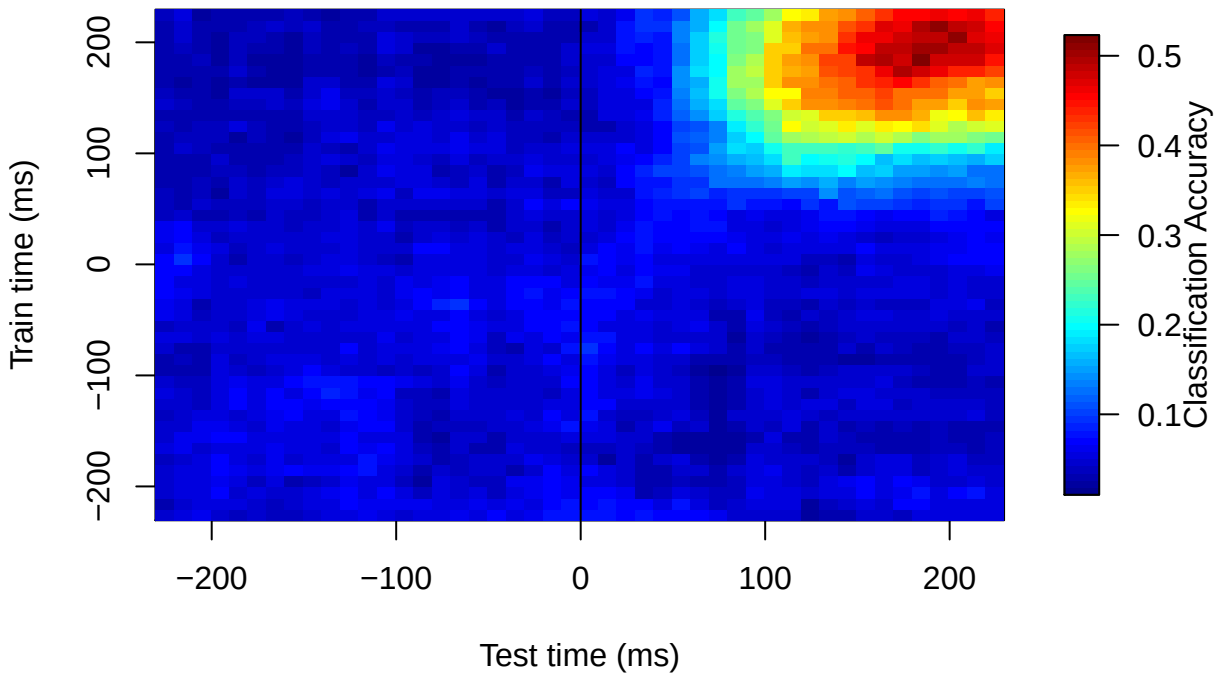
```
selected_result <- DECODING_RESULTS$zero_one_loss_results

selected_mean_results <- colMeans(selected_result)

selected_time_bin_names <- NDTr::get_center_bin_time(dimnames(selected_result)[[3]])

image.plot(selected_time_bin_names, selected_time_bin_names, selected_mean_results, legend.lab = 'Classi
```

```
abline(v = 0)
```


Train time (ms)
200
100
0
−100
−200
−200
−100
0
100
200
Test time (ms)
0.5
0.4
0.3
0.2
0.1
Classification Accuracy