



Variations on Stochastic Gradient Descent

Computational Statistics

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Distributing and Organizing Code

- Reproducibility
- R packages

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Course Summary

What did we actually do?

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What did we actually do?

Oral Examination Prep

What to think of during examination

Organizing Code

- Important to organize code in a meaningful structure
- We have several components we want:
 - Experiment code
 - Source code for functions (which we should be able to reuse)
 - Tests
 - Rcpp code

There is a plethora of ways to organize this. Which one to choose?

R Package

One way is to make an R package

Lots of infrastructure for:

- Connecting to C++ code through Rcpp (no more manual call to `Rcpp::sourceCpp()`).
- Testing: tests go into separate directory and are automatically discovered and run.
- Documentation
- Declare dependencies (other packages, R version)

Different approaches, but we will follow **R Packages** (Wickham and Bryan 2023) throughout this lecture, which makes heavy use of the **devtools** package.

```
install.packages(c(  
  "devtools",  
  "usethis"  
)
```

```
library(devtools)  
library(usethis)
```

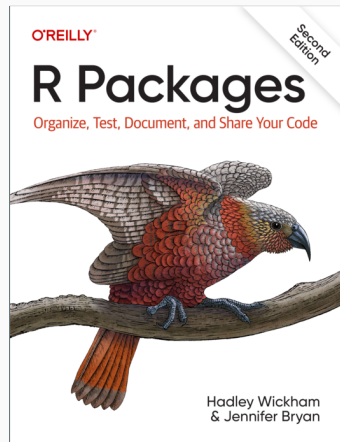


Figure 1: R Packages

Thank you!