STUDENT SEMINAR

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Title

Workshop on "Using Rcpp to write an R package"

Speaker

Stephen Berg

(Fifth-year Ph.D. student in Statistics, **UW-Madison**)

Time & Place

Friday, Dec 7, 3pm, SMI 133





Abstract

We will walk through the process of developing an R package combining R and c++, using the Rcpp and RcppEigen packages. Linking R to c++, at its best, allows us to combine convenient data processing in R with fast c++ code programmed in an organized way using object-oriented programming. We'll discuss what this looks like in practice. We'll also introduce the use of the Eigen c++ library through RcppEigen as a tool for scientific computation. A nice resource is the paper "Fast and Elegant Numerical Linear Algebra Using the RcppEigen Package" (Bates and Eddelbuetel, Journal of Statistical Software, 2013).