



Thursday, 1 July 2021

Ref: 'Introduction to BuildSys' Paper Submission

Dear R Journal Editorial Board

I am writing to you to argue the case for publication of the paper "Introduction to BuildSys: An R Package for Compiling and Debugging R Dynamic Libraries" in the R Journal.

The package itself is entirely generic and applies to the process of compiling and debugging dynamic libraries for use with R. The most important aspect it brings in relation to publication justification is the process simplification that it provides in regard to debugging of dynamic libraries. In the current environment, debugging using tools like GDB and LLDB is something that requires a relatively steep learning curve, so much so that for a significant number of people who are willing to dabble in dynamic library development, will likely give up on for difficulty in debugging code. BuildSys is clearly beneficial for this cohort.

Not only does having good debugging tools that are easily accessible to the majority make debugging more straightforward and informative, it also boosts productivity, even with the seasoned programmer who is capable of debugging through GDB/LLDB alone.

Beyond that, there are a number of general packages directed toward R dynamic library development (Rcpp, TMB and RcppEigen) which would clearly benefit from having access to a simpler more integrated means of debugging libraries.

For these reasons I feel there is a justification to having this introductory paper published in the R Journal.

Yours Sincerely,

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