**CDM Package Brief Demo**

George, A. C., Robitzsch, Al, Kiefer, T., Grob, J., & Unlu, A. (2016). The R package CDM for cognitive diagnosis models. *Journal of Statistical Software, 74*(2).

**Guided Demonstration:** all files located at [www.matthewmadison.com/research.html](http://www.matthewmadison.com/research.html)

1. Read in the data set and Q-matrix.
2. Fit the full LCDM. Check convergence.
3. Obtain the attribute profile and attribute mastery proportions.
4. Obtain each respondents attribute profile and probabilities of mastery.
5. Obtain the item parameter estimates.

1. Compute classification reliability.
2. Obtain the attribute correlations.
3. Fit reduced models and compare fit.
4. Examine absolute fit of the final model.

* Also, check out the GDINA package (Ma, de la Torre).
* GDINA and CDM (Rupp & van Rijn, 2018)
* Contribute to the DMA web series ($25 amazon gift card, $50 for graduate students)