Why this paper?

We choose to transform the paper with our practical knowledge in Julia. The theoretical framework and analytical approach of this paper seem suitable for many features of Julia environment. It is a game theory paper in which the authors define a model with utility functions, value functions and probabilities and solve with dataset based on all gubernatorial elections ranging from 1950 to 2011 in the U.S. The identification and estimation process involves various optimization problems and many packages in Julia are beneficial for the analysis. Given the large size of dataset, Julia also enjoys the advantage of faster operation and shorter code compared to Stata and Matlab used by the original paper. Throughout the process of replicating the paper and discovering different programming features in distinct environment, our computational skills as well as general understanding of numerical methods have been significantly improved. We learnt how to develop packages and work as a team with version control on GitHub.