VASILE STADNITCHII, ZHIJUN WANG, and QING WANG. Department of Computer Sciences, Mathematics, and Engineering, Shepherd University, Shepherdstown, WV, 25443. Using Programming to Automate the Creation of Excel Spreadsheets.

While conducting research, many find themselves doing mundane tasks using the computer. Although important these tasks can slow research down and take focus away from what really matters. Furthermore, research often requires the visualization of data. This can be done using various tools and methods, but shares the same problem: it is time consuming. This is especially true for large data sets. This study aims to find the effectiveness of using scripting and programming to automate some of these tasks. One thing that mundane tasks have in common is that they are often repetitive and have a pattern to completing them. For example: Moving data from format A to format B, generating graph C, and repeating the procedure N times. For people moving data from one format to another might not be that difficult of a task, but doing that task N times is difficult, especially when N is really big. The opposite is true for a computer program. It might be somewhat difficult to programmatically move data from one format to another, but once that is done, doing it N times becomes irrelevant. The project was supported by NIH Grant P20GM103434 to the West Virginia IDeA Network for Biomedical Research Excellence and the Research Challenge Fund through a Summer Undergraduate Research Experience Grant from the West Virginia Higher Education Policy Commission Division of Science and Research.