Throughout my experience in engineering school, there have been countless group projects, individual assignments, and even personal projects that certainly could have benefit from the use of source code management, or SCM. Source Code Management makes it easier to manage different versions of your code and other engineering designs, such as schematics and board layouts. As an electronics engineering student, almost every assignment includes at least one of the aforementioned. One situation that particularly comes to mind is my entire Transform Methods class.

Transform Methods was heavily based on group work, something that SCM does a great job of managing. While working with my lab partners, we were constantly overwriting each other’s work, and often causing seeming irreparable changes to the source code. There was a particular situation where it took us 4 or 5 hours the night before the final to trace down a simple error that disrupted our entire simulation. With some sort of SCM, it would’ve been easy to revert the code to the last working state and build back from there. Furthermore, using SCM would’ve allowed us to submit a more comprehensive compilation of our work throughout the semester to our professor with seemingly minimal effort.