CSC 600-02 Software Refactorings

This is a research-oriented course which involves an investigation into an advanced and specialized topic – software refactorings. As software systems grow more complex, they become more difficult to understand and revise by manual approaches. Metaprogramming applies programming to the task of analysis and modification of programs. While programming languages provide some built-in but limited metaprogramming facilities (e.g., Java reflection), program transformation systems provide the metaprogrammer with complete access to the program structure to enable arbitrary metaprogramming. This course provides students with hands-on training in use of behavior-preserving program transformation systems (i.e., software refactoring tools).