General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some
 of the material. However, it is the best reproduction available from the original
 submission.

Produced by the NASA Center for Aerospace Information (CASI)

Dr. Rhoda Baggs

University College
Division of Extended Studies
Florida Institute of Technology
150 West University Boulevard
Melbourne, FL 32901-6975
rbaggs@fit.edu

and

Gholam Ali Shaykhian

Engineering Directorate
National Aeronautics and Space Administration
Kennedy Space Center, Florida 32899, U.S.A.
Ali.Shaykhian@nasa.gov

Title: Application of design patterns in refactoring software design

Refactoring software design is a method of changing software design while explicitly preserving its unique design functionalities. Presented approach is to utilize design patterns as the basis for refactoring software design. Comparison of a design solution will be made through C++ programming language examples to exploit this approach.

Developing reusable component will be discussed, the paper presents that the construction of such components can diminish the added burden of both refactoring and the use of design patterns.