

OPTIMIZATION SEMINAR

(Mathematics & Computer Science)



Monday - Feb. 13, 2012
1:00 - 1:50 p.m. in E-575

Presenter: Tahsin Zulkarnine (supervised by Dr. Shahadat Hossain)

Abstract: Design Structure and Iterative Release Analysis of Scientific Software

One of the main objectives of software development in scientific computing is efficiency. Being focused on highly specialized application domain, important software quality metrics, e.g., usability, extensibility, etc., may not be amongst the list of primary objectives. In this research, we have studied the design structures and iterative releases of scientific research software. Dependency Structure Matrix (DSM) is used as a modeling tool to capture the dependencies among system elements such as functions. We computed several architectural complexity metrics, compared releases, computed total release costs and present results from a number of open source scientific research software.

Light refreshments will be provided.

