Insight: National Library of Medicine’s Software for Medical Image Analysis

“The goal of data analysis is insight, not visualization.”

Under funding from the National Library of Medicine, UNC’s Department of Radiology is one of six groups collaborating on the development of a software library to serve as the national standard for medical image segmentation and registration. This software standard will be the foundation for the development and distribution of computer algorithms for delineating organs, diagnosing cancers, comparing images over time and across imaging modalities, modeling patient populations, and more.

This ambitious project is pushing the limits of today’s PC’s and C++ compilers. We are taking advantage of object-oriented design strategies and C++ programming constructs and styles that will ensure the portability, extensibility, and applicability of this toolkit.

The consortium members included the three commercial partners GE Corporate R&D, Kitware, Inc., and MathSoft; and the three academic partners University of North Carolina, University of Tennessee, and University of Pennsylvania.

At UNC, this project is being lead by Drs. Stephen Aylward and Luis Ibanez. Significant contributions are being made by the research assistants: Jisung Kim and Sungwook Park.

For more information, please see the CADDLab web pages at

http://caddlab.rad.unc.edu