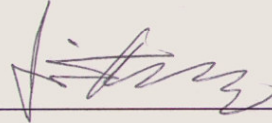


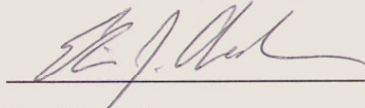
To the Graduate Council:

I am submitting herewith a dissertation written by Joshua R. New entitled "Visual Analytics for Relationships in Scientific Data". I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Computer Science.



Dr. Jian Huang, PhD Advisor

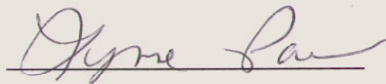
We have read this dissertation
and recommend its acceptance:



Dr. Elissa Chesler



Dr. Michael Langston



Dr. Lynne Parker

Accepted for the Council:



Carolyn R. Hodges, Vice Provost
and Dean of the Graduate School

(Original signatures are on file with official student records.)