U.S. Air Force  
Contract F-49620-79-C-0124  
DATA FITTING  
1 July 1979 - 30 September 1981  
Principal Investigator: G.D. Taylor

During the above period the following articles written with grant support have been published or accepted for publication:


The following manuscripts written with grant support have been submitted to technical journals for publication:


The following manuscripts representing research partially supported are currently being prepared for submission to technical journals:

2. "Reciprocal polynomial approximation on \([0, \infty)\) with nonnegative coefficients", in preparation (with E. Kaufman and D. Leeming).

The following research projects receiving partial support have been completed:

1. Numerical testing of the uniform and restricted range adaptive curve fitting packages, M.S. Thesis, Colorado State University, Spring, 1980, written by James A. Pastoor, directed by Professor Taylor. Mr. Pastoor is currently employed at Hughes Aircraft Corporation, Denver.

Approved for public release; distribution unlimited.

3. Numerical testing of a curve-fitting package utilizing cubic splines, M.S. Thesis, Colorado State University, Summer, 1980, written by Roberta C. N. Okada, directed by Professor Taylor. Miss Okada is currently employed at Lockheed Aircraft Corporation, Sunnyvale, California.


5. An adaptive application of a shape-preserving spline curve fitting routine, M.S. Thesis, Colorado State University, Summer, 1981, written by Chung-Chie George Chow, directed by Professor Taylor. Mr. Chow is currently employed by a small seismographic software company in Dallas, Texas.

The following two projects that received partial support from this contract are now being brought to completion:

1. Data fitting: a survey of existing data sets in the general literature. This will be the topic of a M.S. Thesis paper written by Eileen Fritz.

2. An adaptive application of a monotone preserving cubic spline package. This will be the topic of a M.S. Thesis paper written by Judy Lee.
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   This report lists articles written under support of the contract, which have been published or accepted for publication, manuscripts submitted to technical journals for publication, manuscripts currently being prepared for submission to technical journals, and research projects which received partial support and have been completed.