

MR601632 (82d:30012) [30C30](#) (65E05)

Trefethen, Lloyd N.

Computation and application of Schwarz-Christoffel transformations.

Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 165–171, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980.

The author gives a short description of his implementation of the Schwarz-Christoffel method for the conformal mapping of $D = \{z: |z| < 1\}$ onto the interior and the exterior of a polygon. Noteworthy is the skillful treatment of the parameter problem using a program for the solution of systems of nonlinear equations, and high accuracy Gauss-Jacobi quadrature. Several hundred examples were tested. For a more detailed description, see the author's paper [SIAM J. Sci. Statist. Comput. **1** (1980), no. 1, 82–102; [MR 81g:30012](#)].

{For the entire collection see [MR0601624 \(81m:65007\)](#)}

Reviewed by *D. Gaier*

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