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Bibliography of Stanford Computer Science Reports, 1963-1983

by

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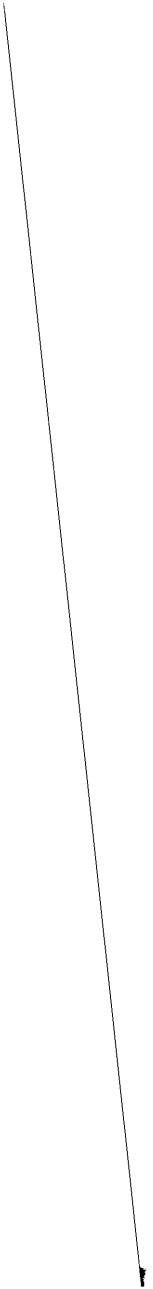
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BIBLIOGRAPHY

1. STAN-CS-63-1 (AD462108), J. B. Rosen, *Primal Partition Programming for Block Diagonal Matrices*, 23 pages, November 1963. *
2. STAN-CS-63-2 (AD427753), J. M. Pavkovich, *The Solution of Large Systems of Algebraic Equations*, 46 pages, December 1963. *
3. STAN-CS-64-3 (AD430445), G. E. Forsythe (translated by), *The Theorems in a Paper by V. K. Saulev 'On an Estimate of the Error in Obtaining Characteristic Functions by the Method of Finite Differences'*, 6 pages, January 1964. *
4. STAN-CS-64-4 (AD434858), Stefan Bergman and J. G. Herriot, *Numerical Solution of Boundary Value Problems by the Method of integral Operators*, 24 pages, February 1964. *
5. STAN-CS-64-5 (N-6519765), J. B. Rosen, *Existence and Uniqueness of Equilibrium Points for Concave N-Person Games*, 28 pages, March 1964. \$2.55 H
6. STAN-CS-64-6 (AD600164), R. W. Hockney, *A Fast Direct Solution of Poisson's Fourier Analysis*, 28 pages, April 1964. *
7. STAN-CS-64-7 (PB176753), J. B. Rosen, *Sufficient Conditions for Optimal Control of Convex Processes*, 29 pages, May 1964. *
8. STAN-CS-64-8 (AD6031 16), G. Golub and W. Kahan, *Calculating the Singular Values and Pseudo-Inverse of a Matrix*, 33 pages, May 1964. *
9. STAN-CS-64-9 (AD60401 2), Charles Anderson, *The QD-Algorithm as a Method for Finding the Roots of a Polynomial Equation When All Roots are Positive*, 74 pages, June 1964. *
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11. STAN-CS-64-11 (PB176754), T. Nakamura and J. B. Rosen, *Elastic- Plastic Analysis of Trusses by the Gradient Projection Method*, 32 pages, July 1964. *
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14. STAN-CS-64-14 (TT-65-61724), V. A. Efimenko (translated by G. Reiter and C. Moler), *On Approximate Calculations of the Eigenvalues and Eigenfunctions of Boundary Value Problems in Partial Differential Equations*, 20 pages, November 1964. *

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38. STAN-CS-66-38 (AIM-40, AD662880), J. McCarthy and J. Painter, *Correctness of a Compiler for Arithmetic Expressions*, 13 pages, April 1966. *
39. STAN-CS-66-39 (PB176760), G. E. Forsythe, *A University's Educational Program in Computer Science*, 26 pages, May 1966. *
40. STAN-CS-66-40 (AD639052), G. E. Forsythe, *How Do You Solve a Quadratic Equation?*, 19 pages, June 1966. *
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89. STAN-CS-68-89 (PB180920), H. R. Bauer, S. Becker and S. L. Graham, *ALGOL W (revised)*, 42 pages, March 1968. *
90. STAN-CS-68-90 (PB178177), V. R. Lesser, *A Multi-Level Computer Organization Designed to Separate Data Accessing from the Computation*, 20 pages, March 1968. *
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110. STAN-CS-68-110 (PB180920), H. Bauer, S. Becker, S. Graham and E. Satterthwaite, *ALGOL W (revised)*, 103 pages, October 1968. *
111. STAN-CS-68-111 (AD692691), J. Friedman and T. Martner, *Analysis in Transformational Grammar*, 18 pages, August 1968. *
112. STAN-CS-68-112 (AD692687), J. Friedman and B. Pollack, *A Control Language for Transformational Grammar*, 51 pages, August 1968. *
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115. STAN-CS-68-115 (AD692686), J. Friedman, T. Bredt, R. Doran, T. Martner and B. Pollack, *Programmer's Manual for a Computer System for Transformational Grammar*, 199 pages, August 1968. *
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120. STAN-CS-68-120 (PB182166), E. Satterthwaite, *Mutant 0.5: An Experimental Programming Language*, 60 pages, February 1968. *
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132. STAN-CS-69- 132, Never Printed.
133. STAN-CS-69-133 (AD687718), G. H. Golub and C. Reinsch, *Handbook Series Linear Algebra: Singular Value Decompositions and Least Squares Solutions*, 38 pages, May 1969. *
134. STAN-'X-69-134 (AD700923), G. H. Golub and M. A. Saunders, *Linear Least Squares and Quadratic Programming*, 38 pages, May 1969. *
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