Dr. M. B. Reed: List of Publications

a) Refereed Journal Articles

M. B. Reed & H. Wainman, ‘Language competence in mathematics’, International Journal of Mathematics Education in Science & Technology, 9, 31-33 (1978)

M. B. Reed, ‘A series solution for the root of a polynomial’, Bulletin of the Institute of Mathematics & its Applications, 16, 24-28 (1980)

M. B. Reed, ‘Learning mathematics in a foreign language’, Pacific Regional Information on Mathematics Education, 4, 22-28 (1982)

M. B. Reed, ‘The computer analysis of test data using interactive graphics’, Civil Engineering Transactions of the Institution of Engineers, Australia, CE25, 57-62 (1983)

M. B. Reed, ‘Influence of linguistic factors upon mathematics achievement among second-language learners’, International Journal of Mathematics Education in Science & Technology, 15, 437-446 (1984)

M. B. Reed, ‘An investigation of numerical errors in the analysis of consolidation by finite elements’, International Journal of Numerical & Analytical Methods in Geomechanics, 8, 243-257 (1984)

M. B. Reed, ‘Stresses and displacements around a cylindrical cavity in soft rock’, I.M.A. Journal of Applied Mathematics, 36, 223-245 (1986)

S. McKee & M. B. Reed, ‘An algorithm for the alignment of gas turbine components in aircraft’, I.M.A. Journal of Mathematics in Management, 1, 133-144 (1987)

M. B. Reed, ‘An elastoviscoplastic model for soft rock’, Engineering Computations, 5, 65-70 (1988)

M. B. Reed, ‘The influence of out-of-plane stress on a plane strain problem in rock mechanics’, International Journal of Numerical & Analytical Methods in Geomechanics, 12, 173-181 (1988)

X.-D. Pan & M. B. Reed, ‘A coupled distinct element - finite element method for large-deformation analysis of rock masses’, International Journal of Rock Mechanics and Mineral Sciences & Geomechanics Abstracts, 28, 93-99 (1991)

M. B. Reed, ‘Newton-like methods with limited storage, for the solution of elasto-viscoplasticity problems’, International Journal for Numerical Methods in Engineering, 35, 223-240 (1992)

M. B. Reed, 'Incorporation of strain-hardening in the implicit elasto-viscoplasticity algorithm', Communications in Numerical Methods in Engineering, 9, 331-336 (1993)

M. B. Reed, P. Grasso, D. Rizzi & G. Rabajoli, 'Improvement of rock properties by bolting in the plastic zone around a tunnel: a numerical study', International Journal of Rock Mechanics & Mining Sciences, 30, 567-571 (1993)

Z. Li & M. B. Reed, 'A finite element method to model progressive fracturing', Computer Methods in Applied Mechanics & Engineering, 120, 303-313 (1995)

Z. Li & M. B. Reed, 'Convergence analysis for an element-by-element finite element Method', Computer Methods in Applied Mechanics & Engineering, 123, 33-42 (1995)

M. B. Reed, 'A new limited-storage quasi-Newton algorithm for large-scale minimization', Analele stiintifice Univ. Ovidius Constanta, 3, 176-185 (1995)

I. Hladík, M. B. Reed & G. Swoboda, 'Robust preconditioners for linear elasticity FEM analyses', International Journal for Numerical Methods in Engineering, 40, 2109-2127 (1997)

M. B. Reed, 'An H-form variant of the Partitioned Newton method', Applied Numerical Mathematics 45 / 1, 79-85 (2003)

M. B. Reed, 'L-Broyden methods: a generalisation of the L-BFGS method to the limited-memory Broyden family', International Journal of Computer Mathematics, 86(4), 606-615 (2009)

M. B. Reed, 'First steps in Mesh WiFi network design by genetic algorithm', SQU Journal for Science, 17(2), 214-223 (2012)

M. B. Reed, A. Yiannakou & R. Evering, 'An ant colony algorithm for the multi-compartment vehicle routing problem', Applied Soft Computing, 15, 169-176 (2014)

b) Refereed and Published Conference Proceedings

M. B. Reed, 'Language & mathematics at tertiary level', in: P. Clarkson (ed.), Research in Mathematics Education in Papua New Guinea 1981, M.E.C. Press, Lae 1981: pp. 80-96

M. B. Reed, 'Techniques for the analysis of seepage in porous elastic media using parabolic isoparametric elements', in: He Guangqian & Y. K. Cheung (eds.), Proceedings of the International Conference on Finite Element Methods, Shanghai, China, Gordon + Breach, New York 1982: pp. 534-539

M. B. Reed, ‘Numerical solutions for the axisymmetric tunnel problem using the Hoek-Brown criterion’, in: G. N. Pande & W. F. van Impe (eds.), NUMOG II: Numerical Models in Geomechanics, M. Jackson & Son, Redruth 1986: pp. 369-374

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M. B. Reed, ‘Non-associated flow rules in computational plasticity’, in: G. Swoboda (ed.), Numerical Methods in Geomechanics, Innsbruck 1988, A. A. Balkema, Rotterdam 1988: pp. 481-488

M. B. Reed & X.-D. Pan, ‘An efficient implementation of the implicit elasto-viscoplasticity algorithm’, in: G. Beer, J. R. Booker & J. P. Carter (eds.), Computer Methods & Advances in Geomechanics, A.A. Balkema, Rotterdam 1991: pp. 1203-1208

X.-D. Pan, P. Grasso, M. A. Mahtab & M. B. Reed, ‘Application of updated Hoek-Brown criterion to predict the loosened zone around a tunnel’, in: G. Beer, J. R. Booker & J. P. Carter (eds.), Computer Methods & Advances in Geomechanics, A.A. Balkema, Rotterdam 1991: pp. 1491-1496

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G. Swoboda, M. B. Reed & I. Hladík, ‘Newton-like methods for the solution of geomechanical problems’, in: Z. Rakowski (ed.), Geomechanics 93, Balkema, Rotterdam 1994: pp. 167-173.

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M. B. Reed, 'Element level solvers for nonlinear finite element analysis', in: H. R. Arabnia (ed), Proc. 2000 Int Conf on Parallel & Distributed Processing Techniques & Applications, Volume I, CSREA Press 2000; pp. 9-14

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M. Reed, 'Codings and crossover operators in a genetic algorithm for sequence alignment', in: A Lofti (ed), Proc. 5th Int Conf on Recent Advances in Soft Computing, Nottingham UK 2004; pp. 62-67

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N. Thomas & M. Reed, 'A hybrid algorithm for continuous optimisation', in: Proc 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway; IEEE 2009; pp 2584 - 2589

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