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ABOUT PUBLICATIONS

Ruhul A Sarker obtained his Ph.D. from Dalhousie University (former TUNS), Canada. He is a Professor in the School of Engineering and IT, and the Director of Faculty PG Research at UNSW Canbarra (located at ADFA), Australia. Prof. Sarker's broad research interests are decision analytics, CI / evolutionary computation, operations research, and applied optimization.

For Future Research Students: Ph.D. scholarships are available for high achieving students (with H1 /High Distinction in UG and Masters by Research) in Computer Science, Information Sciences, Operations Research, or Industrial Engineering under my supervision. If you are interested contact me at r.sarker@adfa.edu.au

Theoretical Research: Design and development of algorithms for solving complex decision and optimization problems. It covers computational intelligence, population based search algorithms (such as evolutionary algorithms) as well as conventional search algorithms. The problem areas include structured (single and multi-objective optimization with or without functional contraints), semi-structured and unstructured problems.

Applied Research Areas: supply chain (design, bottleneck, shipping, and disruption recovery), mining (mine scheduling, coal mining and petroleum production planning), manufacturing (layout and location, production planning, and scheduling), agriculture (crop planning, and land allocation), power generation planning, resource constrained project scheduling, and defence (planning, and performance evaluation).

Professional Engagement: Prof. Sarker is an editor of the Journal of Flexible Service and Manufacturing, an associate editor of the Journal of Memetic Computing, an editor of the Journal of Industrial and management Optimization, and former editor-in-chief of ASOR Bulletin. He had led the technical committee for IEEE Congress on Evolutionary Computation in 2003 and was a proceeding co-chair of IEEE WCCI'2012.

Publications: Prof. Sarker is the lead author of the book '*Optimization Modelling: A Practical Approach*' published by Taylor & Francis /CRC Press. He has edited /co-edited 8 books, on specialised topics in his areas of research, published by the leading publishers. He has 250+ refereed publications including 100+ journal papers. His research has received a number of international media coverages. Some of these media are: Wall Street Journal, Science*Daily*, United Press International (UPI), Times of the Internet,TerraDaily, MarketWatch, EcoEarth, Eurocean, Softpedia, Oneindia, ScienceBlog. For publication detals, visit: https://research.unsw.edu.au/people/professor-ruhul-sarker/publications

Funding: Prof. Sarker has successfully obtained significant external funding for his research that includes Australian Research Council, Defence Science and Technology Organisation and Industry. Recent ARC Discovery Projects:

-- R. Sarker, D. Essam and C. Coello Coello (2017-19) Reactive Planning under Disruptions and Dynamic Changes, $361k

-- R. Sarker and C. Coello Coello (2015-17) Robust Configuration of Evolutionary Algorithms, $237k

Prof. Sarker is interested for personal and industrial research collaboration, and consultancy in his areas of expertise.

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Keywords: Decision Analytics, Supply chain design and redesign; Supply chain disruption recovery planning; Transportation planning; Logistics and inventory; Applied operations research; Simulation; Applied optimization; mine scheduling; Coal production planning; Oil production planning; job shop scheduling; Fleet-mix; Routing and scheduling; memetic computing; differential evolution; genetic algorithm, evolutionary optimization; defence operations research; project scheduling; performance evaluation; production line balancing.

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ABOUT PUBLICATIONS

Books

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