Editorial

The current edition of ORiON contains four research papers, covering a wide range of topics in operations research.

The first paper is titled "Anomaly detection using autoencoders with network analysis features", by Ball, Krüger and Drevin. This paper is concerned with the detection of fraudulent activities in a financial system and proposes a unified approach to the problem using autoencoders in order to detect anomalies in a transactional setting. The second paper, "Route overlap metrics to batch orders", by Hofmann and Visagie, investigates different metrics used to perform order batching for a unidirectional cyclical picking system. Realistic numerical experiments are presented, resulting in useful results relating to the optimisation of the system.

The penultimate paper, "On the calibration of stochastic volatility models to estimate the real-world measure used in option pricing", by Levendis and Maré, presents interesting results related to the Heston and Bates stochastic volatility jump models in the context of option pricing. The paper illustrates that historical equity returns can be used in order to calibrate these models. The final paper included is "Celebrating 50-years of OR in South Africa – a bibliometric analysis of contributions to international OR literature", by Ittmann. This paper reviews the contributions made by South Africans to the international academic operations research literature.

I thank the authors for their interesting papers and for choosing to publish their research in ORiON. I also wich to express my gratitute to Dr Elzanie Bothma, the journal manager, and Mrs Jeanne Marié Coetzee, the typesetter, for their assistance in the preparation of this issue.

Jaco Visagie June 2023