



Operations Research Society of South Africa

Category IV Recognition Award

(To an upcoming member of ORSSA of age 35 or below for excellence in operations research practice)



Colin Andrew Phillips

Citation By Sheetal Silal, on behalf of the Executive Committee of ORSSA.

Colin Andrew Phillips was born in Florida, West of Johannesburg. His childhood was spent in many different cities across SA due to his father working on the mines. He completed his matric at St Benedicts College in 2003. Colin then went on to study at WITS, completing a BSc in statistics & applied mathematics in 2006. He followed this with an Honours degree in operations research from the same institution the following year, winning the best honours project prize in mathematical sciences. In 2015 he achieved the Certified Analytics Professional (CAP) qualification from INFORMS.

He worked at OPSI Systems for 8 years in the consulting team, developing innovative solutions for optimization & simulation projects in the supply chain industry. Colin was also involved in data curation and visualization.

At OPSI, Colin worked on several projects in supply optimisation, and routing. He was responsible for projects for large companies in the creation of territories and routes for the sales people and delivery vehicles in many consultation projects. He was also the chief designer on two system. The first is a system for the creation of daily visit plans for sales people. The second is methodology for detecting stockout on supermarket shelves based on anomalies in daily sales history.

In 2017 he moved to Discovery to join the Data Science Lab where he has brought his energy, creativity, unconventional thinking and wit to the team. He is widely recognized at the company for his strong work ethic, mentoring of graduates and keenness to take on any task which would use science to make things better.

Notable contributions include:

- using structured & unstructured data to model member journeys
- improving recruitment practices for call centre agents
- linear programming to optimize resource use for conservations
- extensive work to assist the DSY research team who co-ordinate surveys
- corporate member segmentation
- team sizing for servicing new products
- design of an operations data repository for advanced analytics
- implementation & training to productionise models

Colin has been responsible for rolling out best practices in analytical teams at Discovery, and continues to read widely to ensure the latest research techniques are applied where appropriate. Colin is proficient in R, Python, SAS, MATLAB, SQL and Julia. He has presented papers at ORSSA conferences over the years and is a regular contributor at the lean coffee meetups in Johannesburg. Colin attended the Google Deep Learning

Indaba in 2018 and has also participated in SatRDays. He also complete a 1-year advanced business course at Gibbs this year.

Colin is an incredible example of how versatile an operations researcher can be and has encouraged many others to study this discipline.

In recognition of the excellent service rendered to the local profession of operations research in general in his capacity as an analyst and data scientist, first at OPSI Systems and now at Discovery, Colin Andrew Philips, on this 10th day of September 2019, duly awarded a Category IV ORSSA Recognition Award. I call on the President to confer the award.