Prof Ryan Loxton

Prof Ryan Loxton

Theme Lead

Theme 3

Ryan is an ARC Future Fellow and the discipline lead for mathematics and statistics at Curtin. His work focuses on using advanced mathematics to optimise complex processes in a wide range of applications such as mining, oil and gas, agriculture, and industrial process control.

Ryan is a passionate advocate for industry engagement and has worked with many companies including Woodside Energy, Linkforce, Fleetcare, and Vekta Automation.

Ryan's research interests lie in the areas of optimisation, optimal control, and data science.

Ryan is the Theme Leader for Research Theme Three focusing on optimising maintenance planning and scheduling. He represents Curtin and Theme Three on the Strategic Risk and Reporting Board and PhD Support Panel.

Publications

- Long-term maintenance optimization for integrated mining operations (...) —

Journal Article

Yingying Yang

Authors: Yingying Yang, Ryan Loxton, Andrew L. Rohl, Hoa T. Bui
2023-11-16

- Cutting Plane Algorithms are Exact for Euclidean Max-Sum Problems (...) —

Journal Article

Dr Hoa Bui

Authors: Hoa T Bui, Sandy Spiers, Ryan Loxton
2023-09-17

- Bayer digestion maintenance optimisation with lazy constraints and Benders decomposition (...) —

Journal Article

Sandy Spiers

Authors: Sandy Spiers, Hoa T. Bui, Ryan Loxton, Moussa Reda Mansour, Kylie Hollins, Richard Francis, Christopher Martindale, Yogesh Pimpale
2023-09-16

- Cutting plane algorithms for nonlinear binary optimization (...) —

Journal Article

Dr Hoa Bui

Authors: Bui, Hoa; T Lin, Qun; Loxton, Ryan
2022-03-18

- An exact cutting plane method for solving p-dispersion-sum problems (...) —

Journal Article

Sandy Spiers

Authors: Sandy Spiers, Hoa T. Bui, Ryan Loxton
2022-07-22

- Approximate dynamic programming for an energy-efficient parallel machine scheduling problem (...) —

Journal Article

Dr Mojtaba Heydar

Authors: Dr Mojtaba Heydar, Dr Elham Mardaneh, Proj Ryan Loxton
2022-10-01

- A Note on the Finite Convergence of Alternating Projections (...) —

Research at Curtin

Journal Article

Dr Hoa Bui

Authors: Hoa Bui, Ryan Loxton, Asghar Moeini
2021-05-09
- Minimizing equipment shutdowns in oil and gas campaign maintenance (...) —

Journal Article

Prof Ryan Loxton

Authors: Z.Seif, R.Loxton, E.Mardaneh and A.Lockwood
2020-06-29
- Branch-and-price for clash-free periodic supply vessel planning problem with split delivery and variable service time (...) —

Journal Article

Dr Elham Mardaneh

Authors: Elham Mardaneh, Mojtaba Heydar, Ryan Loxton
2022-09-09

Presentations

- 2020 ANZIAM Early-career Workshop (...) —

Prof Ryan Loxton

Theme Lead

Theme 3
2020-01-31

- AMPeak. Annual conference put on in Perth by the Asset Management Council (...) —

Prof Ryan Loxton

Theme Lead

Theme 3
2019-04-08

Awards and Prizes

- 2020 Christopher Heyde Medal (...)

Tools

Content by label

There is no content with the specified labels