



The Australian Society for Operations Research and Data 61 present

## A Workshop on Modelling with Constraints

Tuesday 29 March 2016

5:30pm – 8:30pm

Room 152, Building 15, UNSW ADFA Campus

Constraint Programming has come to prominence over the last decade as a powerful tool for modelling and solving a rich variety of industrial and academic problems. This workshop will give attendees a grounding in modelling problems using a Constraint Programming language, and also look at different ways of solving these models.

### Title: Constraint Modelling in MiniZinc

#### Description:

This workshop introduces MiniZinc, a constraint-based modelling language for optimisation problems. MiniZinc lets you write high-level, declarative models for problems such as scheduling, time tabling, vehicle routing or rostering - anything that can be expressed by constraints over integer and real-valued variables. MiniZinc can solve these models using a range of different algorithms, from Mathematical Programming (LP, MIP) to Constraint Programming and SAT/SMT. The workshop introduces you to the MiniZinc language and system through a series of hands-on examples and exercises. Download the open source MiniZinc system at [www.minizinc.org](http://www.minizinc.org).

#### Presenter: Dr Guido Tack

Guido is a Senior Lecturer at the Faculty of Information Technology, Caulfield Campus, Monash University, leading the Modelling, Optimisation and Visualisation research flagship. He is also a member of the Optimisation Research Group at NICTA.

His research focuses on architecture and implementation techniques for constraint programming systems. He leads the development of version 2 of the MiniZinc constraint modelling language and toolchain. He is also one of the main developers of Gecode, an open, free, portable, accessible, and efficient constraint programming library.

Since 2014 he has been elected as a member of the Executive Committee of the Association for Constraint Programming. He maintains the ACP's web site and edits the quarterly CP Newsletter.

#### Cost and Registration:

*Free for ASOR ACT Chapter members. To join ASOR-ACT, it is free for students and only \$45 for non-students to join. Membership application forms can be accessed at <http://www.asor-act.net/join.html>*

*Registration is mandatory by sending an email before 1pm Monday 28 March to [Sondoss El Sawah S.EISawah@adfa.edu.au](mailto:S.EISawah@adfa.edu.au)*