

ASOR News — September 2013

Contents

MODSIM/ASOR 2013 Conference Update	1
Upcoming OR Seminars	1
September ASOR Seminar	1
Postgrad and Postdoc News	2
MINLP workshop	2
Computational Intelligence Day	2
ORSNZ and NZSA Joint Conference	2
Second International Optimisation Summer School	3
ASOR Melbourne email List	3
ASOR Linked-In Group	3
Membership	3
Support for Visiting Researchers	3
Summary of OR workshops and conferences in Australia	4
Web Pages of Interest	4
Committee Membership for 2013-2014	4

MODSIM/ASOR 2013 Conference Update

The due date for submitting either full papers or extended abstracts for the MODSIM/ASOR 2013 conference has now passed, and reviewing is underway. There are around 100 papers in the ASOR tracks.

The conference organising committee has advised repeatedly about the potentially high demand for accommodation in Adelaide in the first week of December. It would be wise to get on with booking somewhere to stay, if you have not done so already.

International Visitors

MODSIM will be attracting some OR people from abroad, including Mark Barrett from UCL in London and Jacek Blazewicz from Univ. Poznan in Poland. ASOR Melbourne is interested in knowing who else is coming and in particular whether they might be visiting Victoria in their travels. We are looking at hosting seminars and/or a mini-workshop in the lead-up to MODSIM/ASOR. Some travel support may be available from ASOR on application.

Upcoming OR Seminars

ASOR Melbourne Series

18 September 2013, 6pm, RMIT Room 8.9.66 and other sites by Access Grid. **Marcelle Gannon**, University of Melbourne, *Optimal Packing List for Mixed Produce Box Delivery*.

16 October 2013, 6pm, RMIT Room 8.9.66 and other sites by Access Grid. **Guy Eitzen**, Aurecon.

Opt and OR in Melbourne Seminar Series

24 September 2013, 3.30pm, Brown Theatre, Building 193, University of Melbourne. **Ambros Gleixner**, Zuse Institute Berlin, *Efficient algorithms for MINLP* — *Standing on the shoulders of linear programming*.

10 October 2013, 6pm, JH Michell Theatre, Department of Mathematics and Statistics, University of Melbourne. **Akshay Venkatesh**, How to stack oranges in three dimensions, 24 dimensions, and beyond.

For more information about these events, visit http://www.or.ms.unimelb.edu.au/

AMSI/ANZIAM AGR National Seminars

For information about these events, visit http://www.amsi.org.au/index.php/research-a-higher-education-mainmenu/access-grid/national-seminar-series.

September ASOR Seminar

Optimal Packing List for Mixed Produce Box Delivery

Marcelle Gannon, University of Melbourne



For a university project I applied operations research techniques to a local business which home-delivers fixed-price boxes of mixed fresh produce. Currently the proprietor determines a satisfactory box contents list each week by trial and error. This project formulates a mixed-integer linear program to find an optimal list of produce types and quantities.

A method is developed for approximating the customers' perception of the box quality. Implementation is carried out in Excel and, following the tuning of parameters through discussions with the proprietor, suitable box listings output. The optimisation process is fast, saving the proprietor time, but the major benefit is the ability to experiment with different price points each week, giving opportunities for increased profits and customer satisfaction.

Postgrad and Postdoc News

ASOR warmly welcomes Simon Bowly (Monash University), Nicholas Knowles (RMIT), Niraj Dayama (Monash), Hamid Mokhtar (U. Melbourne), Kajan Nadarajah (RMIT), Valeria Echeverria (RMIT), Priyanki Sharma (RMIT), Fofana Agbeve (RMIT), Behrooz Bodaghi (Swinburne) and Esala Gunatilake (RMIT) as new student members of ASOR Melbourne.

Nahid Jafari has finished her post-PhD stint at CSIRO where she co-authored a MODSIM paper titled **Accounting** for renewable energy supply intermittency in energy systems modelling with CSIRO and U. Newcastle colleagues. She is now travelling in the US at present. Also in North America are Tarek ElGindy and James Minas. James is spending time with David Martell in Canada, as part of his postdoc with RMIT and Vic DEPI on bushfire-related topics. Tarek has commenced a at Carnegie-Mellon five-year PhD program University.

ASOR Melbourne held a well-attended **OR student get-together event** on Wednesday 21 August. Central in afternoon's activity was **Niraj Dayama**'s talk on port and container scheduling, to an audience of two dozen postgraduate students, most members of the ASOR Melbourne committee and several other ASOR members.

MINLP workshop

Optimisation and Operations Research in Melbourne is holding a one-day workshop on MINLP. Invited speakers Timo Berthold and Ambros Gleixner will present a one-day workshop on MINLP topics on September 25th. Topics will include basic algorithms for LP-based MIP, extensions for discrete nonlinear constraints, extensions for nonconvex MINLP and applications.

Further details, including the venue and schedule updates, can be found on www.or.ms. unimelb.edu.au. This workshop is made possible through the generous support from NICTA ORG and the Faculty of Engineering (University of Melbourne).

Computational Intelligence Day

An event entitled **Computational Intelligence Day** will be held at UNSW Canberra from 10am to 5pm on Tuesday 24th of September 2013, in Room 154, Building 15. It features discussions and four plenary talks:

Plenary Talk 1: Coupling Metamorphic Systems With Event Processing to Create Autonomous Adaptive Systems. Prof. Garrison Greenwood, Portland State University, Portland, Oregon, USA.

Plenary Talk 2: Evolvable Hardware: a growing or dying field of EC? Prof. Pauline C Haddow, Norwegian University of Science and Technology, Norway.

Plenary Talk 3: Representation in Evolutionary Computation. **Prof. Daniel Ashlock**, University of Guelph, Canada.

Plenary Talk 4: *Multigame Playing - a Challenge for Al/Cl.* **Prof. Jacek Mandziuk**, Warsaw University of Technology, Warsaw, Poland.

For enquiries contact Dr. Kamran Shafi (k.shafi@adfa.edu.au).

ORSNZ and NZSA Joint Conference

Analytics for a Changing World: From Data to Decisions. Sunday 24 November to Wednesday 27 November 2013, University of Waikato.



The Australian Society for Operations Research, Inc. Melbourne Chapter

As part of the International Year of Statistics and Mathematics of Planet Earth 2013, the Operations Research Society of New Zealand (ORSNZ) and the New Zealand Statistical Association (NZSA) are holding a joint conference hosted by the University of Waikato in Hamilton.

This conference incorporates both the 47th Annual ORSNZ Conference and the 64th Annual NZSA Conference. The conference will start with a welcome function on Sunday 24 November. The conference sessions will run from Monday 25 November to Wednesday 27 November, with a conference dinner on Tuesday 26 November.

The conference organisers would like to announce a call for papers in any and all practical and theoretical aspects of OR and Statistics. We are also particularly interested in submissions within the growing area of Analytics. Abstract submissions will close on 27 September.

The conference will welcome entrants for the ORSNZ Young Practitioner Prize (\$1000 in prize monies to distribute) and will also be supporting students through reduced conference fees and travel grants.

For more information and abstract submission instructions, please visit the conference website: https://secure.orsnz.org.nz/conf47/.

Second International Optimisation Summer School

The 2nd International Summer School on Optimisation will take place in Kioloa, New South Wales, from 12th to 17th January 2014. The school is sponsored by the Optimisation Research Group of NICTA, and organized by Prof. Toby Walsh from NICTA.

The school will focus on solving large scale combinatorial optimisation problems in practice. The school is intended for PhD and Master students, and will include both introductory and advanced material.

Lecture topics covered include: introduction to constraint programming, modelling, integer programming, column generation, uncertainty, vehicle routing, scheduling, supply networks and research skills.

Lecturers include Simon Dunstall, Phil Kilby, Pascal van Hentenryck, Martin Savelsbergh, Peter Stuckey, Mark Wallace and Toby Walsh.

The registration page is open now and applicants will be considered as they are received. Visit http://acpshcool.wufoo.com/forms/registration-form/

Whilst you should register your details now, a registration fee will be required of all accepted participants towards the end of 2013.

The exact amount will depend on sponsorship being currently raised but will be less than US\$200. The registration cost will include all food and accommodation.

The School will again be held at ANU's beautiful seaside campus at Kioloa, near Bawley Point on the south coast of New South Wales.

ASOR Melbourne email List

If you need to update your details for our mailing list, melbourne-list@asor.org.au, visit the web page at http://asor.org.au/mailman/listinfo/melbourne-list_asor.org.au, where you can maintain your information, subscribe or unsubscribe.

ASOR Linked-In Group

Members who have accounts LinkedIn should visit http://www.linkedin.com/groups/Australian-Society-Operations-Research-4473262, which covers ASOR nationally.

Membership

Are you a lapsed member but still on the ASOR mailing list? Please do stay on the list, but also strongly consider renewing your ASOR membership. Newly-redesigned membership forms are online at http://www.asor.org.au/melbourne/membership.html.

(ASOR Melbourne's total 2013 membership now stands at 99 full and student members)

Support for Visiting Researchers

Have you got an interstate or international visitor? ASOR Melbourne has committed funds to assist with the costs of visits, in exchange for visitors



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The Australian Society for Operations Research, Inc. Melbourne Chapter

giving a seminar for the members. Contact your favourite committee member to discuss the opportunities.

Summary of OR workshops and conferences in Australia

MODSIM 2013 / ASOR 2013. Adelaide Convention Centre, December 1-6, 2013. The Theme of the conference is Adapting to Change: the multiple roles of modelling. MODSIM 2013 incorporates DORS and the 2013 ASOR National Conference. http://mssanz.org.au/modsim2013

The 4th Freight Logistics Optimisation Workshop (FLOW), on 9 December 2013, is a one-day course introducing optimisation to logistics practitioners in industry. Holiday Inn, Flinders Lane, City. FLOW is a joint initiative of CSIRO, ASOR and the Logistics Association of Australia.

2nd International Summer School on Optimisation, Kioloa, New South Wales, 12-17 January 2014. http://acpshcool.wufoo.com/forms/registration-form/

Web Pages of Interest

We are affiliated with FASTS through AMSC. To keep abreast of FASTS activities, consult: www.usyd.edu.au/fasts

ASOR National: www.asor.org.au

ASOR Melbourne Chapter:

http://www.melbourne.asor.org.au/

NZ OR Society http://www.orsnz.org.nz/

ORS (UK): http://www.orsoc.org.uk/

INFORMS (US): http://www.informs.org/

IFORS: http://www.ifors.org
Optimisation in Melbourne:

http://www.or.ms.unimelb.edu.au/

For the latest international news, conference and jobs details see: http://www.ifors.org/

panorama/index.html

tutOR: http://www.tutor.ms.unimelb.edu.au

Committee Membership for 2013-2014

Chair — Simon Dunstall, 0417 330 231, simon.dunstall@csiro.au

Vice Chair — Patrick Tobin, 03 9953 3199, Patrick.Tobin@acu.edu.au

Secretary — Kaye Marion, 03 9925 3162, k.marion@rmit.edu.au

Treasurer — Paul Lochert, 03 9802 4628, plochert@bigpond.net.au

Student Representative — Cameron MacRae, cameron.macrae@rmit.edu.au

Committee:

Moshe Sniedovich

03 8344 5559,

m.sniedovich@ms.unimelb.edu.au

Henry Burley

03 9458 1872, h.burley@latrobe.edu.au

Red Ceglowski

03 9903 4569,

Andrzej.Ceglowski@buseco.monash.edu.au

Gaurav Singh

03 9545 8467, Gaurav.Singh@csiro.au

David Marlow,

david.marlow@dsto.defence.gov.au

Melih Ozlen

03 9925 3007, melih.ozlen@rmit.edu.au

Mohsen Jafari Songhori,

m.jafarisonghori@student.unimelb.edu.au

Baikunth Nath (ex-officio)

0433 926 091, baikunth@unimelb.edu.au

Newsletter Editor — Simon Dunstall

The AUSTRALIAN SOCIETY for OPERATIONS
RESEARCH Inc.
MELBOURNE CHAPTER
GPO Box 1048, Melbourne, Vic 3001