NEWSLETTER

June 2011

Operations Research Society of New Zealand, Inc.
PO Box 6544, Wellesley St. Auckland, New Zealand, www.orsnz.org.nz

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The newsletter is published three times per year. Regular dates are April, August, and December. Submissions deadline is the 15th of the month for the following month's issue. Send contributions by email to the Newsletter editor, Kenneth Kuhn, at newsletter@orsnz.org.nz.

President's Report

Welcome to our first 2011 newsletter.

On behalf of all ORSNZ members, I'd like to express my condolences to all our Christchurch members for the losses they have suffered as a result of the recent earthquakes. It must be harrowing not knowing if another shock will hit, and what level of new damage it may cause.

Last week, I was approached by a Canterbury resident seeking advice on the design of a staff roster. He told me a harrowing story of being at sea when the big quake struck, and having to make his way to his son's school first by boat (through surprisingly turbulent waters), then by car along broken roads and then, when these were blocked, by bicycle. He arrived to discover a partially collapsed building with no children to be seen. Fortunately, he was a lucky one; everyone was ok. It seems that our colleagues at Canterbury University have also been lucky with no reports of serious injuries. Others have not been so fortunate. Our thoughts are with everyone in Canterbury through these trying times.

On a happier note, we enjoyed a very successful 45th Annual ORSNZ Conference in Auckland at the end of last year. The conference included 51 presentations, with Professors Martin Savelsbergh and Tava Olsen giving excellent plenary addresses. Professor Savelsbergh presented a new column generation technique that has proven very successful for large logistics problems, while Professor Olsen challenged us to think more deeply about the use of pricing mechanisms to manage demand. I also really enjoyed the excellent talks by two of our sponsors, IBM ILOG and Fonterra. I was particularly pleased to learn that OR is indeed making a difference at NZ's largest exporting company.

As always, the Young Practitioner Prize (YPP) presentations were most professional and stimulating. This year, the $1000 prize pool was distributed between three prize winners with a further three young practitioners receiving honourable mentions. The Energy Centre at the University of Auckland Business School introduced two new prizes for 'Energy and Resources' and 'Transportation' with a total prize pool of $1000. All prize winners are listed at http://www.orsnz.org.nz/prizes/ and will be profiled in the next newsletter.

We are very grateful to the conference sponsors for their support. These include IBM (who gave away a very generous random prize, coincidentally to a lucky YPP winner), Fonterra, Dercetto, The Energy Centre (part of the University of Auckland Business School), Mighty River Power, Hoare Research Software Ltd and the Department of Engineering Science at the University of Auckland. I am very grateful for the support of the organising committee including

Matthias Ehrgott, Michael O'Sullivan, Andrea Raith, Cameron Walker, and Golbon Zakeri.

Their hard work helped ensure this conference was a success.

The conference web site, including full papers, is now available at the (hopefully) easy-to-remember address http://conf2010.orsnz.org.nz. Please feel free to browse the papers available on this site.

As usual, the conference activities included the ORSNZ Annual General Meeting, followed by a Council meeting. One of the roles of the AGM is to elect a new Council. This year, we welcome Geoff Pritchard as the new ORSNZ Secretary. Geoff replaces Fernando Beltran, who was served the society admirably in this role for several years now. John Buchanan, a long standing member of the society, joined the committee as a representative from the University of Waikato. Most of the Council members from last year agreed to serve again. The new Council is listed below.

President	Andrew Mason
Vice President	Matthias Ehrgott
Newsletter Editor	Ken Kuhn
Treasurer	Andrea Raith
Secretary	Geoff Pritchard
APORS/IFORS Liaison	David Ryan
Industry Representative	Geoff Leyland
Council Member	Fernando Beltran
Council Member	John Paynter
Council Member	Stefanka Chukova
Council Member	Ross James
Council Member	Alastair McNaughton
Council Member	Andy Philpott
Auckland Branch Chair	Golbon Zakeri
Wellington Branch Chair	Mark Johnston
Christchurch Branch Chair	Grant Read
Waikato Branch Chair	John Buchanan

The AGM discussed the results of trialling free membership for students and recent graduates. While the results from 2010's trial were difficult to interpret, it was felt that this was a worthwhile initiative and this option is again available this year.

As a result of discussion at the AGM, this year's subscription form includes the option for members to receive paper or electronic versions of the newsletter and the conference proceedings. Please be sure to return your subscription form

The ORSNZ gratefully acknowledges the generous support given by these sponsors for the 2010 Annual Conference.

to us if you do not wish to change to the default electronic-only option for these. It is likely that, like other societies, we will eventually move to electronic versions of all our publications. Feedback via your subscription forms helps us gauge your support for such a move. Please also feel free to send me any comments you may have on this.

At the AGM, I thanked Andrea Raith for all the contributions she is making in her new treasurer role. I also acknowledged the hard work of our auditor, Paul Rouse, whose careful attention to detail gives us all peace of mind. I also thanked Fernando for his hard work as secretary, and Ken Kuhn for putting our newsletter together (as he has done again for the issue you are now reading). This newsletter gives me another opportunity to acknowledge the valuable contributions these members make for the society.

Please remember that there will be no ORSNZ conference this year; members are instead encouraged to attend the *IFORS 2011* conference in Melbourne; see http://www.ifors2011.org/ for more information. The IFORS conference is preceded by a workshop, *Integer Programming Down Under*, being organised by Martin Savelsbergh, Hamish Waterer and Natashia Boland at the University of Newcastle, Australia. Please see the workshop web site, http://carma.newcastle.edu.au/nuor/ipdu/, for registration details. The next ORSNZ conference is scheduled for November/December 2012 at Victoria University, Wellington.

I look forward to seeing many of you in July at the IFORS Melbourne conference.

Andrew Mason
President
13 May 2011
president@orsnz.org.nz

Chapter News

Auckland News

Firstly, those of us up in Auckland were relieved to find out that all ORSNZ members were unharmed by the Christchurch earthquake earlier this year. Our thoughts continue to be with those harmed by the earthquake of course.

May brought us many graduates. Of particular note were Tony Downward who was awarded a PhD and Gary Nates who obtained a masters degree. Tony's thesis, supervised by Golbon Zakeri and Andy Philpott is titled ``Impact of Transmission on Strategic Behaviour in Electricity Markets". His abstract reads:

"In this thesis, we investigate the impact of transmission on the strategic behaviour of firms competing in deregulated electricity wholesale markets. Assuming uniform-price auctions and locational marginal pricing, we first investigate the properties of the dispatch problem over networks that are constrained and/or lossy. Without loops and losses we derive important results as to how price varies as a function of demand at each node. Conversely, for networks with loops and losses, we discuss the non-convexity of the dispatch problem and show that the optimal value function may be non-convex.

We model the strategic firms as Cournot agents, and discuss how the assumptions surrounding the rationality of the agents can influence the equilibrium outcomes. Under a full-rationality assumption, we prove that over a lossless radial network, with firms owning single generators, the line capacities ensuring that a single-node Cournot equilibrium exists form a convex set. However, in the case of networks with loops or with firms owning multiple generators we provide counter-examples to this convexity.

We investigate the prices coming from a two-node network with a lossy line and find the conditions such that a generator is guaranteed to have a quasi-concave revenue function. We use this result to prove that there exists a pure-strategy equilibrium for a Cournot game over the same network.

In the final chapters we present some applications of this work. We first define a mixed-integer stochastic transmission planning model that uses the set of capacities derived earlier as constraints to ensure that the unconstrained equilibrium exists for all periods. Finally, we examine the effect of carbon charges over a two-node network and find that the imposition of a carbon change may increase emissions when firms behave strategically over a constrained network."

This year we have had several visitors thus far and several OR related seminars in the department. 2011 started with the seminar delivered from Professor Sven Krumke who was visiting Matthias Ehrgott from Kaiserslautern University. Sven spoke on Mathematics and Soccer. In March we also heard from Marie Schmidt who is visiting us from Institut für Numerische und Angewandte Mathematik - Arbeitsgruppe Optimierung, University of Gottingen. Marie spoke on ``Integrating routing decisions in public transportation problems". In April we heard from Katharina Beygang who is visiting us from the University of Kaiserslautern on the topic of the train marshalling problem and last but not least, this

month we had a seminar by Dr. Pierre Girardeau who is the UBIFRANCE postdoc with Andy Philpott. Pierre spoke on “An application of stochastic optimization to power systems.”

Golbon Zakeri

Dr. Tony Downward on graduation day.

Wellington News

No news reported.

Waikato News

No news reported.

Canterbury News

The Management Science group briefly hosted Katherina Beygang from University of Kaiserslautern, Germany, as part of the OptAli exchange, until the 22 February earthquake. Katherina wisely took refuge in Auckland!

Now the MSCI group is banished from the red-stickered Commerce Building, probably until May 2012. With some luck, some of us will get space in temporary housing in the "Oval Village". In the mean time, we "hot desk" in the small but homey Social Work Building, or work from home. Honours teaching this year is taking place in the Sunday School room of the Chinese Church on Greer's Road.

Shane Dye, Nicola Petty, and Stephen Starkey plan to attend IFORS. Fritz is on sabbatical to DTU in Denmark for July-Sept, then Caltech in Los Angeles for Oct-Dec.

John Raffensperger

Possible Re-establishment of NZ Mathematical Sciences Council

In the mid-1990s, representatives of professional societies in the mathematical sciences in New Zealand got together to form a council, which then became the standing committee of the Royal Society of NZ for Mathematical and Information Sciences. Over the next 15 years, this committee formed a very good vehicle for effective communication and cooperation between the NZ Association of Maths Teachers, the NZ Mathematical Society, the NZ Statistical Association and the Operations Research Society of NZ, as well as linkages with relevant international bodies. It sponsored various activities including promotion of careers in the mathematical sciences, and establishment of the Jones Medal. Unfortunately it was one of a number of committees disbanded 18 months ago, as part of a restructuring by the RSNZ Council. But the NZIMA is now playing a role in a possible re-establishment of the original grouping, by bringing representatives of the above societies (plus the NZ branch of ANZIAM, and Statistics NZ) at a meeting in June to consider the way forward, and some possible new initiatives.

[reprint from NEW ZEALAND INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS (NZIMA), Newsletter 31 May 2011]

OptALI Workshop 14-18 February 2011 in Auckland

Let me first introduce OptALI: In March 2009, the University of Gottingen (UGOE) (Germany), The Technical University of Kaiserslautern (UNIKL) (Germany), the Technical University of Denmark (DTU) (Denmark), and The University of Auckland (UOA) submitted a proposal for participation in the International Research Staff Exchange Scheme (IRSES) through the project titled Optimization and its Applications in Learning and Industry (OptALI). This proposal was led by Professor Matthias Ehrgott at Engineering Science at UOA and Professor Anita Scobel at UGOE and was subsequently approved by the European Commission and in August 2009. The New Zealand Government (via the Ministry of Research, Science and Technology - MoRST) committed to funding to support the involvement of University of Auckland researchers in the OptALI Project. The University of Canterbury (UOC) joined the project in August 2010. The OptALI project encourages the exchange and strengthening of research collaboration via an exchange programme that allows European OptALI members to visit UOA and UOC, and similarly New Zealanders to visit the European partner universities. Apart from researcher exchanges other activities include workshops in both New Zealand and Europe. The OptALI project has its own website, please visit http://optali.com.

The first OptALI workshop took place 14-18 February in Auckland. The workshop was focused on integer programming problems arising in applications and was organised by Matthias Ehrgott, Andrew Mason, Andrea Raith, and David Ryan from the Department of Engineering Science at UOA. The workshop consisted of lectures and presentations be professors, experienced researchers and students. There were five exciting days of lectures, talks and learning. The workshop was attended by Professor Anita Schobel, her PhD student Marie Schmidt, and Susanne Wiedenmann from the UGOE, Professor Sven Krumke and his PhD students Katharina Beygang and Christiane Zeck, and Ines Raschendorfer from the UNIKL, Kenneth Kuhn from UOC and of course staff and students from UOA such as Professor Matthias Ehrgott, Professor David Ryan, Andrew Mason, Andrea Raith, Stuart Mitchell, Ed Bulog, Oddo Zhang, Tony Downward, Jon Pearce, Iain Dunning, Imran Ishrat, Siamak Moradi, Tim Harton, Antony Philips, Stephan Hassold, etc.. Workshop details, lecture notes and slides can be found on the website:
http://optali.com/workshops/auckland2011/

Monday, the first day of the workshop was dedicated to short presentations on attendee's research topics to get everyone familiar with each others' research interests and spark discussions. Andrew Mason started off the day and the workshop by a talk about OpenSolver, an open source alternative to Excel Solver developed by Andrew, see also http://opensolver.org/. The next speaker was Andrew's PhD student Oddo Zhang, who introduced his research into the moveup of ambulances, followed by Andrew's master student Ed Bulog presenting on staff rostering. Next up was Tony Downward who gave an insightful introduction to generator optimisation in deregulated electricity markets (such as the NZ electricity market). PhD student Susanne Wiedenmann introduced us to supply planning of linseed oil as a renewable resource. Katharina Beygang spoke about the distribution of empty freight cars in the German railway network. Kenneth Kuhn's presentation was dedicated to biobjective optimisation in air traffic applications and infrastructure management. The day concluded with a meeting of the OptALI board.

Back to front and left to right: Andrew Mason, Iain Dunning, Kenneth Kuhn, Katharina Beygang, Marie Schmidt, Stephan Hassold, Matthias Ehrgott, David Ryan, Tim Harton, Sven Krumke, Anita Schobel, Tony Downward, Susanne Wiedenmann, Oddo Zhang, Christiane Zeck, Ines Raschendorfer, Andrea Raith, Jon Pearce, Imran Ishrat.

Tuesday morning was dedicated to robust optimisation concerned with finding solutions to optimisation problems that remain “good” when

changes to input data occur. For example, a train timetable could be considered robust if it can still be operated reasonably well when delays to some lines occur. Professor Anita Schobel introduced us to this exciting topic. Anita's lecture was followed by an application of robust optimisation in robust timetable information presented by Marie Schmidt. The workshop participants spent Tuesday afternoon in the computer lab learning to use PuLP, an LP modeller written in Python. PuLP is an open source LP modelling language and at the same time embedded in the Python programming language. The session was run by Stuart Mitchell, who maintains the PuLP project. Details on PuLP can be found here: https://www.coin-or.org/PuLP/.

On Wednesday Professor David Ryan gave a lecture on set partitioning problems and their applications. David shared his extensive experience on this topic with the workshop participants. David introduced his audience to the theory of set partitioning problems and solution methods. David introduced many applications that give rise to set partitioning models such as airline scheduling problems, Tour of Duty planning, vehicle routing and cell batching for an aluminium smelter.

Wednesday evening the Aucklanders took their guests to a visit to Galbraith's alehouse to enjoy some of their excellent micro brewed tab beer. A visit to Galbraith's is almost mandatory for any visitor to the department!

Professor Sven Krumke gave a lecture on online optimisation on Thursday. Online optimisation problems assume incomplete knowledge of all information necessary to define a problem instance. An simple example is the online ski-rental problem. A skiier is faced with the decision of whether to buy skis for a price of $B or to rent them at a daily cost of $1. The skiier will ski every day until the (unknown) end of the ski season. Should the skier buy or rent? Of course the optimal decision is easy if the length of the ski season is known. Online optimisation algorithms are judged by the quality of the solution they can achieve if given the “worst possible” online data compared to an algorithm that knows all data and can make a truly optimal offline decision. Sven gave an interesting and challenging introduction to this topic and applications of online optimisation. His presentation was complemented by that of his PhD student Christiane Zeck, who discussed the delay management problem of a single train line where the online decision to be made at every train stop is whether to wait for delayed passengers or not.

On Friday morning Anita Schobel introduced us to Integer Programming with Transport Applications. Anita introduced the delay management problem where the decision needs to be made for public transport vehicles travelling along different lines whether to wait or not to wait for delayed passengers that are transferring at a station. The objective here is to minimise passenger inconvenience. Decisions to delay a vehicle may have effects on other vehicles such as tracks that are occupied for trains. Marie Schmidt then extended the problem to a delay management problems where delayed passengers may be re-routed.

On Friday afternoon Professor Matthias Ehrgott lectured on integer problems with multiple objective functions. Matthias first discussed optimality concepts and the complexity of these problems. Then Andrea Raith continued the lecture and discussed “easy” combinatorial multiobjective optimisation problems such as the shortest path and biobjective integer minimum cost network flow problem and solution approaches. Matthias took over again and more challenging methods such as the two phase method with three objectives, scalarisation and branch and bound.

On Saturday some workshop attendees took the chance to visit Pakiri Beach and Goat Island north of Auckland for some horse riding and diving. After the week's hard work the everyone spent Saturday afternoon having a Kiwi-style bbq at Matthias Ehrgott's house. We had a nice afternoon on Matthias' beautiful deck with lovely food and company and even a 30th birthday celebration.

Overall we enjoyed five days of learning, discussing research and of course meeting colleagues from overseas. I am already looking forward to the next workshop which will take place in (European) summer 2012 in Gottingen.

Andrea Raith

Paragon Decision Technology wins INFORMS Edelman Award

CHICAGO, April 11, 2011

Midwest ISO, Alstom Grid, and Paragon Decision Technology have been awarded the Franz Edelman Award for outstanding Achievement in Operations Research and Management Sciences at a banquet sponsored by the Institute for Operations Research and Management Sciences (INFORMS) in Chicago tonight.

"We are honored and proud to be part of the Midwest ISO team that has won the INFORMS Edelman Award 2011. This award is strengthening us to succeed in our mission to bring the benefits of Operations Research to society. Working closely together with our customers and applying the benefits of AIMMS has again proven to be essential for success."

Gertjan de Lange, VP at Paragon Decision Technology

Midwest ISO with Alstom Grid, Paragon Decision Technology, The Glarus Group, and Utilicast have levered the advances in computing capabilities and OR algorithms to energy and ancillary services markets. They added significant value to the Midwest region through improved reliability and increased efficiencies of the region's power plants and transmission assets. Based on its annual Value Proposition study, the Midwest ISO region realized between $2.1 and $3.0 billion in cumulative savings from 2007 through 2010. Midwest ISO estimates an additional $6.1 to $8.1 billion of value will be achieved through 2020.

Midwest ISO ensures reliable operation and equal access to high-voltage power grid in 13 U.S. states and the Canadian province of Manitoba. Midwest ISO manages one of the world largest energy markets clearing nearly $23 billion in energy transactions annually and serving the electrical energy needs of over 40 million end-use customers.

The Franz Edelman competition recognizes outstanding examples of operations research (O.R.)-based projects that have transformed companies, entire industries, and people's lives.

O.R. uses advanced analytical methods to help make better decisions. Since its inception 40 years ago, cumulative dollar benefits from Edelman finalist projects have reached over $170 billion.

Past Edelman winners include, HP, Motorola, IBM, General Motors, Continental Airlines, Dutch Railways, Indeval, Canadian Pacific Railway.

For further information on the competition and on the other 2011 Franz Edelman finalists, please visit the INFORMS newsroom.

http://www.informs.org/About-INFORMS/News-Room/Press-Releases/Edelman-Winner-2011

About PARAGON

Paragon Decision Technology is an innovative technology company with offices in The Netherlands, Seattle (US) and Singapore. For over 20 years, Paragon has been developing and selling AIMMS, a unique mathematical optimization platform. AIMMS customers can create optimization engines and solutions that enable optimal decision making on complex strategic, tactical or operational problems. We are passionate about our mission of bringing the benefits of OR to society by providing the means that enable our customers to do this successfully. In addition to our platform AIMMS, our people and our partner and academic network are vital to our success. The depth and breadth of their knowledge regarding OR and optimization modelling enables our customers to capture their business problems in well-defined AIMMS models.
www.aimms.com

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Minutes of the Forty-Fourth Annual General Meeting of the Operational Research Society of New Zealand

Date: November 29th 2010

Time: 17:30

Place: Clock Tower, University of Auckland

Attending: Alastair Duffy, Alastair McNaughton, Andrea Raith, Kenneth Kuhn, Nicola Petty, Ross James, Matthias Ehrgott, John Paynter, John F Raffensperger, Shane Dye, Andrew Mason, Fernando Beltran, Mark Johnston, Bruce Benseman, Tiru Arthanari, Bob Cavana, John Buchanan, Geoff Leyland, Golbon Zakeri

Apologies: Vicky Mabin, Stefanka Chukova

Proxies received: None

Minuted by: Fernando Beltran

A. Minutes of 2009 AGM and matters arising from it

Andrew Mason asked comments to the audience on the Minutes of the 2009 AGM .

John F Raffensperger discussed the "zero fee" option for students wishing to join the Society.

Andrew Mason moved that the minutes of the previous AGM be accepted as true and correct. Carried unanimously.

B. President's Report

The President presented his annual report, which had previously sent via e-mail.

The President spoke about the membership. He pointed out that the number of paid members has gone up. In 2010 accepting payments over on the Web has been a contributor to improving numbers.

He also reported on the electronic option for students. Out of four students, two switched to the "no fee" option. The President said he could not draw any conclusion on the matter. Nevertheless, he is confident that next year a higher number of students will opt for such option.

The President thanked Andrea Raith for her work as Treasurer and reminded the audience of the excellent job done by the auditor Paul Rouse. He also highlighted Kenneth Kuhn's commitment to editing the he Newsletter in the previous year.

On the issue of GST deregistration the President concluded that the move was worth it. It was pointed out that Hoare Research continues to pay for the Newsletter.

The move on hosting ORSNZ site to GoDaddy was a bit slow but acceptable. Online credit card payments are working fine. Payments are still being done on the Engineering Science website. For that reason the President recommends switching to Pay Pal.

After thanking last year's conference organizers, the President announced there will be no 2011 ORSNZ Conference and encouraged the members to register for Melbourne IFORS 2011.

Andrew Mason moved that the President's report be accepted. Carried unanimously.

C. Treasurer's Report

The Treasurer, Andrea Raith, spoke to the Treasurer's report as of June 2010.

The Treasurer reported on having $ 48,000 at the beginning of 2010. As many payments arrived in August and the report refers to Society's revenues as of June 2010, they were not registered in the current report.

The Treasurer reports the Society sponsored the Conference in the amount of $6,000.

On the matter of credit card operation charges by Visa, the Society pays $778 in fees.

Bob Cavana questioned the advantages of the GST deregistration. The President answered that

an analysis was done for the 2009 AGM and results were positive.

A discussion ensued on the pros and cons of GST deregistration. President reiterated that the analysis used 7 years of data and insisted on how positive results were.

Nicola Petty moved to acclaim the Treasurer's work over the last year.

John Paynter moved that the President's report be accepted. Carried unanimously.

D. Annual Report

The President acknowledged the Wellington, Christchurch and Auckland reports, and then requested comments on the reports.

Bob Cavana noted that University of Lancaster Professor Mike Wright's visit to Wellington occurred in 2009 but was reported on the 2010 Wellington branch report.

The President moved that the branches reports be accepted. Carried unanimously.

The President also thanked the Newsletter Editor, Kenneth Kuhn, with acclamation. Kenneth then mentioned the possibility of turning the Newsletter into a semi-annual publication.

Andrew Mason moved that the Annual Report be accepted. Carried unanimously.

E. Election of Officers for 2009/10

The President chaired the election of Society officers.

The President announced Geoff Pritchard as the new Society's Secretary and asked John Buchanan to be Waikato University representative.

John F Raffensperger welcomed a Waikato branch and moved that the AG declare that it welcomes a Waikato branch. Bob Cavana seconded the move.

The President proposed Paul Rouse continued to be the auditor.

The President moved that all changes in the Council be accepted.

Nicola Petty asked the AG for acclamation for the President's role. Carried unanimously.

The Council members proposed were as follows:

Council members Nominees

President Andrew Mason
Vice President Matthias Erhgott
Newsletter Editor Ken Kuhn
Treasurer Andrea Raith
Secretary Geoff Pritchard
APORS IFORS Rep David Ryan
Liaison Officer David Ryan
Industry Representative Geoff Leyland
Fernando Beltran
John Paynter
Stefanka Chukova
Ross James
Alastair McNaughton
Andy Philpott
Auckland Branch Chair Golbon Zakeri
Wellington Branch Chair Mark Johnston
Christchurch Branch Chair Grant Read
Waikato Branch Chair John Buchanan
Paul Rouse is the Honorary Auditor.

Andrew Mason moved that all nominees be elected to these positions.

Carried unanimously and with acclamation.

F. Other business

Matthias Erghott reminded the audience of the idea of having zero fee subscription payments. The President moved rates be unchanged, so membership fees be maintained. Move passed.

On the 2011 AGM:

The President commented on the infeasibility of AGM happening in Melbourne in 2011 and suggested an electronic meeting done on Skype in October or November. He also mentioned the use of Karen and mentioned that other societies use Karen for nationwide meetings. He also commented on the possibility of using Karen to hold visitor's conference.

Shane Dye proposed at least one branch member be present at the 2011 AGM and asked to previously check Karen's availability for the meeting.

John F Raffensperger asked the words "electronic" and "electronically" be used instead of "Skype" in the minutes.

Bob Cavana pointed at the "unrepresented cheques" denomination on the accounts. The issue was clarified by the Treasurer. He insisted that branches would have acknowledged the presence of Professor Professor Mike Wright in New Zealand in 2009. The President asked for amendments to reports to reflect such request.

On the 2011 YPP:

On the issue of whether paying for the YPP participants to go to Melbourne the President recommended not having the prize in 2011. Bob Cavana suggested a review committee for the submitted papers followed by an electronic discussion as the competition could still be run electronically. The President reminded the audience of the benefits of having "physical" presentation for the YPP. Finally, the President suggested the discussion be moved to the Council.

On the proposed "online" newsletter:

The President says posting the newsletter "gives something in return" to members. John Paynter added that postage costs are about $250 per year and reminds the AGM that the newsletter is currently on-line too.

It was suggested that people opt for not having paper newsletter and getting a discount on membership fee. John Buchanan suggested sending next newsletter with an announcement saying the newsletter will be switched to electronic form.
John F Raffensperger suggested running an on-site query on who would prefer to switch to getting the newsletter on the e-mail. Then the President asked the AG who would like to keep receiving a paper copy. As a result the President proposed to include a tick box on the subscription form to opt for paper newsletter or not, with an option to get a discount

Matthias Erghott seconded the proposal.

On the issue of Society's cash funds:

Nicola Petty mentioned the $40,000 plus dollars the Society currently owns and asked whether such money could be used to pay for our web site upgrades.

On the issue electronic proceedings:

The President suggested getting rid of paper (hardcopy) proceedings. Bob Cavana reminded the audience that many conferences produce CD-ROMs or have websites with access to proceedings and the asked "why spend money on printed proceedings"?

President summarized the discussion. Proposed to only have a collection of printed abstracts and keep production of proceedings. He wants the Society to move to electronic means of communications.

A long discussion ensued on the benefits of not having hardcopies of proceedings. Golbon Zakeri asked whether proceedings could be made PBRF eligible. John F Raffensperger reminded the AG that incentives remain to submit a paper to conference if there is still a deadline, which would be enforced when proceedings have to be printed. Matthias backed John's claim.

The President asked the AG to vote the issue. 4 members voted for the paper option. The rest of attendants voted for the electronic option.

John F Raffensperger asked the Council to consider scanning all previous proceedings and make them available on the Society's website.

The President asked the Council to consider moving to electronic issues of proceedings.

The President also proposed no changes in the frequency of the newsletter be made.

On a final issue

The President reported that Shane Henderson, a prospective visiting fellow, would no longer be able to attend. He proposed an announcement on that news be made on next newsletter.

At 18:40, the 2010 AGM meeting was closed.

How They Did :: Predicting stock price movements (over 60 minutes) – INFORMS Data Mining Contest Results

Dear All,

During the last months, INFORMS Data Mining Section holds a Data Mining Contest (http://kaggle.com/informs2010) which required participants to develop a predictive analysis solution that predicts is a stock price will increasing or decreasing in 60 minutes according to the data we have now (60 minutes before).

Eg.: Is Apple stock price will increasing or decreasing in 60 minutes (ex.:at 10:30) according to the data we have now (60 minutes before (ex.: at 9:30)).

Competitors were provided with intraday trading data (609 explanatory variables) showing:

- Stocks price values (at five minute intervals)
- Sectoral data (at five minute intervals)
- Economic data (at five minute intervals)
- Experts' predictions (at one week intervals)
- Indices (at five minute intervals)

Traders, analysts, investors and hedge funds are always looking for techniques to better predict stock price movements. Being able to better predict short-term stock price movements is a boon in high-frequency context, so the methods developed in this contest have a big impact on the finance industry. Knowing whether a stock will increase or decrease allows traders to make better investment decisions, better understand what drives stock prices (supporting better risk management).

This is the overview of the contest:

- 28,496 visits on the competition website (http://kaggle.com/informs2010)
- 894 participants
- 147 submitted predictive analysis solutions
- 27 countries were represented (In order of most participants to fewest: United States, Colombia, India, Australia, United Kingdom, France, Thailand, Canada, Germany, Argentina, Japan, Afghanistan, Albania, Austria, Belgium, Chile, China, Croatia, Ecuador, Finland, Greece, Hong Kong, Iran, Poland, Portugal, Slovak Republic and Venezuela)

This is the results of the contest:

Overall ranking:

1) Cole Harris from DejaVu Team

2) Christopher Hefele from Swedish Chef Team

3) Nan Zhou from Nan Zhou Team

"Not using future information ranking":

1) Anuja Kokrady, Sweta Agrawal, Merin Varghese and Mahesh Kumar Tambi from Ams2009 Team

2) Jong-Seok Lee from Jumper Team

3) Piaomiao from Piaomiao Team

See:
http://kaggle.com/informs2010?viewtype=results
for full results.

Cole Harris (#1), Christopher Hefele (#2) and Nan Zhou (#3) presented the methods they used at INFORMS Annual Meeting. See theirs presentation at:

http://kaggle.com/view-postlist/forum-4-informs-data-mining-2010/topic-190-methodstechniques-used-by-the-top-three-competitors/task_id-2439

Report from Overseas Visitors

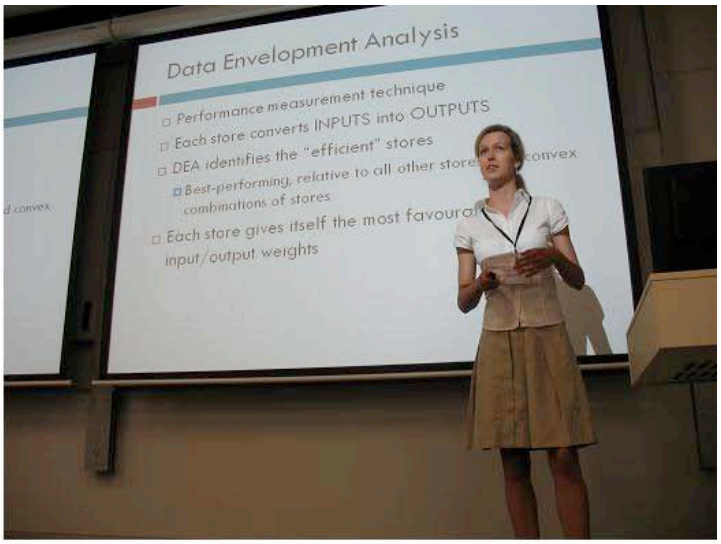
Kia ora! OptALI – "Optimization and its Applications in Learning Industry" – a project and research collaboration between the universities of New Zealand (Auckland, Christchurch), Germany (Kaiserlautern, Göttingen) and Denmark (Copenhagen) brought us – Katharina Beygang and Susanne Wiedenmann- to New Zealand. Katharina is a 3-year PhD-student at the University of Kaiserslautern, Faculty of Mathematics, and Susanne is a 2-year PhD-student at the University of Göttingen, Faculty of Economic Sciences. In December 2010, Susanne started to work in the Department of Engineering Science at the University of Canterbury. In February, she moved to Auckland to participate in the summer school of integer programming at the University of Auckland. There, she met Katharina who just arrived in Auckland to spend the next three months in Aoetaora. Besides the professional exchange at work, we explore the countries' capital and its surroundings.

Our travels took us to the Coromandel Peninsula, where we enjoyed the beauty of cathedral cove and pleasure of our company. Additionally, a snorkeling trip to Goat Island – New Zealand's first marine reserve- and a guided horse track which took us along the Pakiri Beach, were very adventures. On Kharangahape road, which is commonly known as K-road, one of the most popular shopping and nightlife destinations of Auckland, we often met other participants of the project to spend a nice time together.

All in all, OptALI gave us the chance to expand our horizon by working interdisciplinary and intercultural. We experienced New Zealand as a place where "small is still beautiful", where informality, friendliness and the human touch is very much part of the work and travel experience.

Katherina Beygang & Susanne Wiedenmann

Photos from the last ORSNZ Conference



Meetings Calendar

New Zealand

46th Annual Conference of the Operational Research Society of New Zealand
November/December, 2012, Wellington

Asia Pacific

Conference for the International Federation of Operational Research Societies
10 – 15 July 2011, Melbourne, Australia
http://www.ifors2011.org

2011 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)
6 – 9 December 2011, Singapore
http://www.IEEM.org

16th International Conference of Hong Kong Society for Transportation Studies
17 – 20 December 2011, Hong Kong, China
http://home.netvigator.com/~hksts/conf.htm

International

11th International Symposium on Operations Research in Slovenia (SOR'11)
28 – 30 September 2011, Dolenjske Toplice, Slovenia
http://sor11.fis.unm.si/

Operations Research Society of Eastern Africa 2011 Conference
13 – 14 October 2011, Nairobi, Kenya
http://www.orsea.net/

International Conference on Operations Research
30 August – 2 September 2011, Zurich, Switzerland
http://www.or2011.ch/

ADT 2011 - 2nd International Conference on Algorithmic Decision Theory
26 – 28 October 2011, Piscataway, USA
http://www.adt2011.org/

EURO XXV International Conference
8 – 11 July 2012, Vilnius, Lithuania
http://www.euro-2012.lt/

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