



GOH KHANG WEN

Lecturer

DEPARTMENT OF PHYSICAL AND MATHEMATICAL SCIENCE

FACULTY OF SCIENCE

UNIVERSITI TUNKU ABDUL RAHMAN

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OBJECTIVE

To utilize my knowledge and skills in Computational Mathematics and Optimization with an established institute that offers better challenges and opportunities.

EDUCATION

January 2009

Master Science in Mathematical Sciences (Optimization)

Universiti Malaysia Terengganu (UMT)

May 2006

B. Sc. (Hons) in Computational Mathematics (CGPA: 3.21)

Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM)

HONOURS/AWARDS

Anugerah Pelajar Siswazah Cemerlang, Jabatan Matematik, UMT 2008

UMT's Postgraduate Financial Assistance Scheme 2007-2008

Dean's List Achievements for semester December 2005-2006

Dean's List Achievements for semester July 2005-2006

Third prize of Olympiad Mathematics KUSTEM 2005

Champion of Olympiad Mathematics KUSTEM 2003

WORK EXPERIENCE

April 2009 – to date

Mathematics Lecturer of Universiti Tunku Abdul Rahman (UTAR)

- Taught mathematics subject to undergraduate students
- Further my previous research studies
- Involve in more scholar activities

June 2006 – Dec 2008

Research Assistant for Professor Dr. Ismail Bin Mohd (UMT)

- Assisted my supervisor in doing research
- Taught final year students using C++ programming
- Helped Professor supervise some final year students in order to complete their research thesis
- Carried out my master studies research

March 2005-June 2005

Industrial Training in MAA Assurance Bhd. Kuala Terengganu

- Worked as Trainee position of Financial Planner
- Learned valuable knowledge about financial planning and management.
- Packaged insurance product according to customer needs

SOCIETIES/ACTIVITIES

2009

Associate Editor of Acta Science, Technology and Management

2008

Secretary/Technical Editor of Jurnal KALAM (Karya Asli Lorekan Ahli Matematik)

- Involved in preparing the proposal of the journal to get approval from publisher and apply the ISSN code for the journal.
- Managed all the documents of Jurnal KALAM.
- Managed the entire Jurnal KALAM's mailing system.
- Involved in arrange and edit the journal format before printing.

Secretary of the 2nd National Seminar on Numerical Optimization and Operation Research

- Prepared proposal of the seminar to get approval from University
- Prepared the letter to invite well-known researcher as invited speaker in the seminar
- Managed all the documents of seminar
- Arranged and managed all the participant's documents

Committee Member of National Seminar on Mathematics and Society 2008 (SKMM08)

- As the chairperson for a parallel section of the research paper presentation.
- Involved in registration and open ceremony of the seminar.
- Arranged and handled the accommodation of the participants.

2007

Assistant of Director and Secretary of the 1st National Seminar on Numerical Optimization and Operation Research

- Involved in preparing proposal of the seminar to propose and get approval from University
- Managed all the documents of seminar
- Prepared the letter to invite well-known researcher as invited speaker in the Seminar
- Assisted the director and secretary to handle all the tasks work smoothly
- Arranged and managed all the participant's documents

2006

Director of the programme 'Lawatan Sambil Belajar ke Universitas Riau, Universitas Andalas dan Universitas Negeri Padang di Indonesia'

- Led the committee members
- Negotiated to get agreement from all sides
- Distributed tasks to all committee member
- Ensured all the tasks run smoothly

2004-2005

Vice President of HIMMAT (Mathematics Society)

- Organized and conducted several programmes to the society's member
- Ensured all the activities/programmes work smoothly
- Coordinated weekly visit to Rumah Anak Yatim Teluk Ketapang

2005

Committee member of the show 'The X-File The case of Snow White and the Seven Dwarfs'
Member of Golden Key

2004

Committee member of Speech Contest 2004

SEMINAR / CONFERENCES

1. **Goh Khang Wen** and Ismail Bin Mohd, *Analyze Steepest Descent Using Maple*, Presented at Computer Science and Mathematics Symposium 2006 (CSMS 2006), Kolej Universiti Sains dan Teknologi Malaysia, 8 – 9 November 2006.
2. **Goh Khang Wen**, *Progress Report: Global Optimization Using Filled Function Method*, Presented at Postgraduate Seminar Faculty Science and Technology 2006 (SSFST2006), FST, Kolej Universiti Sains dan Teknologi Malaysia, 6th December 2006.
3. **Goh Khang Wen** and Ismail Bin Mohd, *An Alternative Newton-like Exact Line Search for Steepest Descent Method*. Presented at The 3rd International Conference on Research and Education in Mathematics 2007, The Legend Hotel, Kuala Lumpur, 10 – 12 April 2007.
4. Ismail Bin Mohd, **Goh Khang Wen** and Yosza Bin Dasril, *Fungsi Pengisian Sebagai Satu Kaedah Pilihan Dalam Pengoptimuman Sejangat*, Presented at The 1st National Seminar on Numerical Optimization and Operation Research, Universiti Malaysia Terengganu, 29 – 30 August 2007.
5. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *Solving Global Optimization Problems by Using Filled Function*, Presented at The 3rd IMT-GT Regional Conference on Mathematics, Statistics and Applications, The Gurney Hotel, Penang, 5 – 6 December 2007.
6. Ismail Bin Mohd, **Goh Khang Wen** and Tan Ee Ling, *A Co-joint Deterministic and Probabilistic Approach For Hard Continuous Optimization*, Presented at The 9th Islamic Countries Conference on Statistical Sciences 2007, Concorde Hotel, Shah Alam, 12 – 14 December 2007
7. Yosza Bin Dasril, **Goh Khang Wen**, Ismail Bin Mohd and Hendra Syarifuddin, *Avoid Oscillation of Steepest Descent Method By Using Fixed Range of Step Size*, Presented at National Seminar on Mathematics and Society 2008, Hotel Grand Continental Kuala Terengganu, 13– 14 Februari 2008.
8. Yosza Bin Dasril, **Goh Khang Wen** and Ismail Bin Mohd, *Perbaikan Prosedur Carian Garis Tepat Seperti-Newton Pada Metode Steepest Descent*, Presented at The 14th National Conference On Mathematics & Congress of Indonesian Mathematical Society, Universitas Sriwijaya, Palembang, 24 – 27 July 2008
9. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *Slide by Slide Method in Solving General Global Optimization Problems*, Presented at The Third International Conference on Mathematics and Statistics, Institute Pertanian Bogor, 5-6 August 2008.
10. Yosza Bin Dasril, **Goh Khang Wen** and Ismail Bin Mohd, *Linearly Constrained Optimization Problem: Portfolio Selection*, Presented at The 1st International Seminar on Science and Technology (ISSTEC 2009), Universitas Islam Indonesia, Jogjakarta, Indonesia, 24th -25th January 2009.
11. Yosza Bin Dasril, **Goh Khang Wen** and Ismail Bin Mohd, *Portfolio Optimization: Computational Approach*, Presented at The 5th Asian Mathematical Conference, Putra World Trade Centre, Kuala Lumpur, 22nd – 26th June 2009.
12. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *New Class of Nonparametric Filled Function*, Presented at 7th International Conference of Numerical Analysis and Applied Mathematics, Aquila Rithymna Beach, Rethymno, Crete, Greece, 18th – 22nd September 2009.
13. Ismail Bin Mohd, **Goh Khang Wen** and Yosza Bin Dasril, *Solving the Global Optimization of Piecewise Functions Using The Objective Function Transformation*, Presented at The 4th. International Conference on Mathematics and Statistics, Universitas Malahayati, Bandar Lampung, Lampung, Indonesia, 13 – 15 August 2009.

PUBLICATIONS

PROCEEDING

1. **Goh Khang Wen** and Ismail Bin Mohd, *An Alternative Newton-like Exact Line Search for Steepest Descent Method*. **Proceedings of 3rd International Conference on Research and Education in Mathematics 2007**, Universiti Putra Malaysia, Applied Mathematics and Mathematics Education, page 222-227.
2. Ismail Bin Mohd, **Goh Khang Wen** and Tan Ee Ling, *A Co-joint Deterministic and Probabilistic Approach for Hard Continuous Optimization*, **Proceedings of The 9th Islamic Countries Conference on Statistical Sciences 2007**, Page 1366-1376.
3. Yosza Bin Dasril, **Goh Khang Wen**, Ismail Bin Mohd and Hendra Syarifuddin, *Avoid Oscillation of Steepest Descent Method By Using Fixed Range of Step Size*, **Proceeding of the National Seminar on Mathematics and Society 2008**, Page 389-400
4. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *Slide by Slide Method in Solving General Global Optimization Problems*, **Proceeding of The Third International Conference on Mathematics and Statistics**, 3A, Page 044-0705.

JOURNAL

1. Nurfadhlina Binti Abd Halim and **Goh Khang Wen**, *Stock Price Prediction in Bursa Malaysia*. **Jurnal Statistika**, Vol. 7 (1) (2007), page 31-36.
2. Ismail Bin Mohd, **Goh Khang Wen** dan Yosza Bin Dasril, *Pencarian Peminimum Sejangat Menerusi Gabungan Kaedah Penurunan Tercuram dan Kaedah Newton*. **MathDigest (Research Bulletin of Institute for Mathematical Research, UPM)** Vol.1 No.1, (Dec 2007), page 1-5.
3. Ismail Bin Mohd, **Goh Khang Wen** and Yosza Bin Dasril, *Fungsi Pengisian Sebagai Satu Kaedah Pilihan Dalam Pengoptimuman Sejangat*, **Jurnal KALAM (Karya Asli Lorekan Ahli Matematik)**, Vol.1 No.1, (June 2008), Page 6-14.
4. Mustafa Bin Mamat, W. Muhamad Amir W. Ahmad, **Goh Khang Wen**, *An Algorithm of Nonparametric Regression Modeling*, **Submitted** to Journal of Fundamental Sciences.
5. Chin, H. S., **Goh, K. W.**, Teo, K. C., Chan, M. Y., , Lisa Ong, G. A. , Lee, S. W., *Predicting the Catalytic Sites of DACS and CAS2 Exploiting DAOCS, IPNS and CAS1 as Learning Model*, **Submitted** to Journal of Molecular Modeling.

BOOK

1. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *A Comparison of Step Size Selection Procedures for Steepest Descent Method*, **Accepted to publish as a Chapter of Book**, Research in Optimization, UMT's Publisher, 2009.
2. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *Avoid Coriolis Phenomena in Steepest Descent Method By Using Fixed Range of Step Size*, **Accepted to publish as a Chapter of Book**, Research in Optimization, UMT's Publisher, 2009.
3. **Goh Khang Wen**, Ismail Bin Mohd and Yosza Bin Dasril, *Solving Global Optimization Problems By Using New Nonparametric Filled Function*, **Accepted to publish as a Chapter of Book**, Research in Optimization, UMT's Publisher, 2009.

FIELDS OF RESEARCH INTERESTED

- Optimization
- Mathematical Programming
- Global Optimization
- Computational Mathematics and Algorithms
- Approximation Theory
- Numerical Method
- Financial Mathematics
- Operational Research