

LEONG WAH JUNE

Ph.D. (Universiti Putra Malaysia)

Assoc. Prof. Dr.
Department of Mathematics
Faculty of Science
Tel: 03 89466677
Fax: 03 89437958
leongwj@upm.edu.my



EXPERTISE

Assoc. Prof. Dr. Leong Wah June major research areas include numerical methods for unconstrained and large-scale optimization, and Newton-like methods for nonlinear systems. He is a recipient of the 2008 Chinese Academy of Sciences (CAS) Postdoctoral Fellowship and the 2008 Academy of Sciences for Developing Countries (TWAS) Fellowship. Major sponsors of Wah June's research include the ScienceFund (Ministry of Science and Innovation of Malaysia (MOSTI), Research University Grant Scheme (RUGS) and Fundamental Research Grant Scheme (FRGS).

Current Research Interest

- **Unconstrained Optimization**

Efforts have been targeted to improve existing methods for solving unconstrained optimization problems include the gradient methods, quasi-Newton methods and conjugate gradient methods. Development of efficient codes is also an active activity within the group.

- **Large-scale Optimization**

Apart from small and medium scale optimization problems, the group also works on large-scale optimization problems. Various low memory methods are derived include the improved gradient methods and memoryless quasi-Newton methods. These methods are particularly important to be used as the solvers for large-scale problems where the calculation of Hessian matrix is unreachable.

- **Nonlinear Systems**

Our group also works on the development of efficient solvers for nonlinear systems. Research on methods for solving system of nonlinear equations has very promising future and since many physical problems can be reduced to find numerical solution of a nonlinear systems.

LINK TO POSTGRADUATE FIELD OF STUDY:

Applied Mathematics, Computational Mathematics

ADDITIONAL INFORMATION: