

Gar Goei Loke

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Education


PhD, National University of Singapore, 2015-19 
Fortunate to be advised by Prof Kim Chuan Toh and Prof Melvyn Sim.


Master's and Degree, University of Cambridge, 2008-12 

Papers in Review


Exploiting Hidden Convexity in Queueing Networks – A Novel
Approach to Optimal Flow Control 
With C. Bandi (Kellogg). Review & Resubmit in Operations Research.

Risk-based Manpower Planning – A Tractable Multi-period Model 
With P. Jaillet (MIT) and M. Sim (NUS). Major Revision in Operations Research.

The Analytics of Bed Shortages – Coherent Metric, Prediction &
Optimization 
With J. Xie (USTC), M. Sim (NUS) and S. W. Lam. Submitted to Operations Research.
Won Best Student Paper at POMS-HK 2018.

Intraday Scheduling with Patient Re-entries and Variability in Behaviours. 
With M. Zhou, C. Bandi, Z.Q.G. Liao, W. Wang. Submitted to MSOM Smart City Ops.

On-going Projects


Robust Water Management. With C. Y. Chin, K. W. Tan and A. Ng 

Robust Joint Capacity and Assignment. With Y. F. Lim and P. Wang 

Inventory Decisions for Subscription-base Rental. With Z. Hu, Q. Tang and G. Yang 


Statement: I am a Data Scientist by profession and an Operations
Researcher by research. I like seeing data and decisions come together
to deliver new value. I've dealt with Public Policy so far, but I'm
excited to explore new avenues!

Employment


 Visiting Assistant Professor, 2019-present
Department of Analytics & Operations, NUS Business School


 Senior Manager, Government Data Office, 2019
Smart Nation and Digital Government Office
Oversee data governance policies and practices across government

 Quantitative Analyst, 2018-19
Data Science & AI Department, GovTech
Data science consultancy service by government for government

 Lead Analyst, Strategic Planning & Research, 2014-17
Public Service Division, Prime Minister's Office
As Team Lead to a team of data scientists, I helped chart the
growth of data science within PSD, forged business
opportunities for the team, mentored and trained team
members, and oversaw key projects.

Other Achievements

 Amateur Drama, 2011-12
Directed, co-produced, scripted and casted in musicals

 International Math Olympiad,
2010 & 2007
Trained the Singapore team as Observer B in 2010;
participated and awarded Bronze medal in 2007