

CURRICULUM VITAE

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GAR GOEI LOKE

Age, Date of Birth : 29 yrs, 19/10/1989
Place of Birth : Singapore
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Employment History

- Jun 2019 – : NUS Business School, National University of Singapore
Present Visiting Assistant Professor, Department of Analytics & Operations
- Feb 2019 – : Smart Nation and Digital Government Office, Prime Minister's Office
May 2019 Senior Manager, Government Data Office. Roles include:
- Overseeing data governance policies and practices across government agencies and their partners
- Aug 2018 – : Government Technology Agency (GovTech)
Feb 2019 Quantitative Analyst, Data Science and AI Department. Roles include:
Collaborating with agency policy units to scope, diagnose and analyse quantitatively policy levers, leading to concrete changes in policy actions or products that are integrated in daily policy operations
- Jan 2014 – : Public Service Division, Prime Minister's Office
Aug 2017 Lead Analyst (HR Intelligence), Strategic Planning & Research.
As Team Lead for PSD's data scientists, my role involved helping to shape the development trajectory of data science within PSD, drafting research workplans for the team, mentoring and training, and project management of key analytics projects. At times, I also participated as an individual contributor, though less frequently. My team was responsible for:
- Studying the effectiveness of HR policies in the Singapore Public Service
 - Applying statistical learning, mathematical modelling and optimization in HR areas such as organizational structure, performance management, recruitment, retention, remuneration, and employee engagement
 - Providing consultancy to public service agencies and helping them develop nascent HR Analytics capabilities
- I also supported the Engineering Planning Office with efforts to grow engineering capabilities in the Public Service and across Singapore.

Academic Papers and Presentations

- 1 Zhou, M., C. Bandi, G. G. Loke, Z. Q. G. Liao, W. Wang. 2019. Intraday Scheduling with Patient Re-entries and Variability in Behaviours. Submitted to MSOM Special Issue on Smart City Operations.
 - Online version soon to be available on SSRN
- 2 Bandi, C., G. G. Loke. 2018. Exploiting Hidden Convexity in Queueing Networks – A Novel Approach to Optimal Flow Control. R&R in Operations Research.
 - Online version at <https://ssrn.com/abstract=3190874>Presented at:
 - Applied Probability Seminar Conference 2019, Brisbane
 - MSOM Conference 2019, Singapore
 - Mostly OM 2019, ShenzhenTo be presented at:
 - INFORMS Annual Meeting 2019, Seattle
- 3 Jaillet, P., G. G. Loke, M. Sim. 2018. Risk-based Manpower Planning – A Tractable Multi-Period Model. Major Revision in Operations Research.
 - Online version at <https://ssrn.com/abstract=3168168>Presented at:
 - MSOM Conference 2018, Dallas
 - INFORMS Annual Meeting 2017, Houston
- 4 Xie, J., G. G. Loke, M. Sim, S. W. Lam. 2018. The Analytics of Bed Shortages – Coherent Metric, Prediction and Optimization. Submitted to Operations Research.
 - Online version at <https://ssrn.com/abstract=3041878>
 - The paper was awarded Best Student Paper at POMS-HK 2018.

On-going Work and Working Papers

- 1 Adaptive Distribution Decision Rule in Resource Allocation Problems
 - On-going work with Y. F. Lim and P. Wang
 - Collaboration with Resorts World Sentosa
 - To be presented at INFORMS Annual Meeting 2019, Seattle
- 2 Inventory Decisions for a Subscription-based Fashion Retailer
 - On-going work with Q. Tang and Y. Xiao
- 3 Jurong Port – Workforce Planning & Scheduling
 - On-going work with J. Pang, K. C. Tan, Q. Sun, R. Wang and J. Y. Cheng
 - Collaboration with Jurong Port
- 4 Water Management and Dispatch from a Robust Perspective
 - Work done with Public Utilities Board and GovTech

Education History

- 2015 – 2019 : Department of Mathematics, National University of Singapore
PhD student, advised by Prof Toh Kim Chuan (Department of Mathematics) and
Prof Melvyn Sim (Department of Analytics & Operations)
- 2008 – 2012 : Fitzwilliam College, University of Cambridge
Masters of Mathematics (Distinction)
BSc (Hons) 2nd Class Upper

Other Experiences / Achievements

- 2012 : Directed, co-produced and scripted a University-level amateur musical performance
- 2011 : Casted in a major role in a University-level amateur musical performance
- 2010 : Trained the Singapore team to the International Mathematics Olympiad in Kazakhstan (Observer B)
- 2007 : Represented Singapore in the International Mathematics Olympiad in Hanoi (Bronze)