Jingyi Kenneth Tay

Curriculum Vitae

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Education

Fall 2016	**Ph.D. Candidate in Statistics**, *Stanford University*, Stanford, CA.
2010	**A.B. in Mathematics**, *Princeton University*, Princeton, NJ.
	Summa Cum Laude. Certificates in Program of Applied & Computational Mathematics, Program of Finance.
2005	**GCE 'A' Levels**, *Anglo-Chinese Junior College*, Singapore, *4 As, 2 Special Paper Distinctions*.

Research Experience

2010	Senior Thesis: *Maximizing Expected Logarithmic Utility in a Regime-Switching Model with Inside Information.*
	Advisor: Prof Ramon van Handel
2009	Junior Independent Work: *Construction of Space-Time Block Codes from a Decoding Point of View.*
	Advisor: Prof Robert Calderbank

Teaching Experience

09/2016–Present	**Teaching Assistant**, *Department of Statistics, Stanford University*, Stanford, CA. Only 2nd-year student selected to develop material and teach new "Introduction to R" course for undergraduates. 94% of students described instruction of the course as "Excellent" and "Good".
09/2008–01/2010	**Grader**, *Mathematics Department, Princeton University*, Princeton, NJ. Graded weekly problem sets for classes on single- & multi-variable calculus, linear algebra.

Work Experience

10/2015–08/2016	**Data Scientist (Data Science Division)**, *Infocomm Development Authority of Singapore*, Singapore.

- Spearheaded engagements with a wide array of government agencies (economic, transport, social) to analyze their data to support public policymaking. Responsibilities included project scoping, data cleaning, visualization, statistical analysis and presentation of results.
- Systematized and tested recruitment framework and materials for all roles in the division, including data scientist, quantitative strategist and front-end developer.
- Developed division's operating policy for data management and statistical disclosure control.

04/2014– 03/2015	**Staff Well-Being Committee Chair**, *Ministry of the Environment & Water Resources*, Singapore.

  ○ Led team of 10 officers in conceptualizing and executing activities to improve staff welfare and morale.
  ○ Managed and accounted for budget (20K+) for staff welfare.

09/2013– 09/2015	**Assistant Director (Environmental Policy Division)**, *Ministry of the Environment & Water Resources*, Singapore.

  ○ Drove progressive policies to ensure sustainability and efficiency of Singapore's waste management system.
  ○ Facilitated Ministry's strategic planning by conceptualizing and organizing Policy Wing retreat.
  ○ Evaluated usefulness of movement data in predicting spread of *Chikungunya* virus in Singapore.

04/2012– 08/2013	**InfoComm Technologies Engineer**, *Ministry of Defense*, Singapore.

  ○ Evaluated operational performance of critical communications systems.
  ○ Made operational effectiveness more transparent by developing and implementing a new reporting dashboard for senior management.
  ○ Strengthened in-house user adoption of systems through crafting and delivering technical presentations.

Awards and Honors

2017	Two Sigma Graduate Fellowship in Statistics.
2017	Departmental Teaching Assistant Award.
2010	Election to Sigma Xi Honor Society.
2009	Early Induction to Phi Beta Kappa Honor Society (top 1% of cohort).
2007, 2008	Shapiro Prize for Academic Excellence, Princeton University.
2007	Second Prize, International Mathematics Competition.
2006, 2008	Honorable Mention, William Lowell Putnam Competition.
2006-2010	Public Service Commission Overseas Merit Scholarship (Open) (full-ride college scholarship), Public Service Commission, Singapore.
2006	Lee Kuan Yew Award for Mathematics & Science, Ministry of Education, Singapore.
2005	Gold Award (top score), Asian-Pacific Mathematical Olympiad.
2004, 2005	Sliver Medal, International Mathematical Olympiad.
2003	Honorable Mention, International Mathematical Olympiad.