

Yeow-Khiang Chia

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Research Interests	Information Theory, Machine Learning and Signal Processing, Operations Research, Wireless Communications and Networking
Education	<p>Stanford University Ph.D. in Electrical Engineering, January 2012 Thesis topic: Multi-terminal Secrecy and Source Coding GPA: 4.0/4.0 Advisers: Profs. Abbas El Gamal and Tsachy Weissman Thesis Committee: Profs. Thomas Cover and Ada Poon</p> <p>Stanford University M.S. in Electrical Engineering, January 2012, GPA: 4.0/4.0</p> <p>Imperial College, London M.Eng. (First Class Honours) in Electrical Engineering June 2001 Thesis topic: Lyapunov methods for adaptive gain control</p>
Professional Experience	<p>Scientist, Modulation and Coding Department, Institute for Infocomm Research, Singapore Feb 2012 - Current</p> <p>Research Assistant, El Gamal Group, September 2006 - December 2011. PhD thesis research on Network Information Theory</p> <p>Visiting Research student, Prof. Zhang Lin's group, Tsinghua University, China March 2010 - May 2010. Worked with Prof. Zhang Lin and students on Throughout and Delay scaling in wireless mobile networks</p> <p>Summer Intern, Ji Research Group, June 2007- September 2007. Worked with Profs. Hanlee Ji and Tsachy Weissman on signal processing for shotgun DNA sequencing</p> <p>Research Attachment at Institute for Infocomm Research, Singapore August 2005 - August 2006. Worked with Dr Abdul Rahim Leyman on signal processing for localization in wireless networks</p> <p>Strategic Planning Executive, Ministry of Home Affairs, Singapore April 2003 - July 2005. Worked on manpower, budget, coordination and planning policies for the Ministry</p> <p>Summer intern at Center for Imaging, Remote Sensing and Processing (CRISP) July 2000 - September 2000. Worked on image processing algorithms for satellite images</p>
Awards and Honors	<p>Stanford Graduate Fellowship, 2009 - 2011</p> <p>Singapore Agency for Science, Technology and Research (A*STAR) National Science Scholarship, 2006-2011</p> <p>IEE prize for distinction (top performing student) in the four years degree course at Department of Electrical and Electronics Engineering, Imperial College. June 2001</p>

Singapore Public Service Commission scholarship for undergraduate studies at Imperial College, 1997-2001

Skills

Masters and PhD level courses taken at Stanford University:

- Information Theory and Probability Theory
- Machine Learning and Signal Processing
- Mathematical Optimization and Discrete Algorithms
- Control Theory, Linear Dynamical Systems and Stochastic Systems
- Game Theory and Economics

A full list of courses taken is given in Appendix A.

Programming skills and experience: Proficient in Matlab, Python, R, C, C++

Teaching Experience

Teaching Assistant, EE278A: Introduction to Statistical Signal Processing
Taught by Prof. Tsachy Weissman, Fall 2012.

Teaching Assistant for short course in Network Information Theory taught at Tsinghua University, China
Taught by Prof. Abbas El Gamal, March 2010-April 2010.

Publications

A full list of publications is given in Appendix B, or the following website:
<http://www1.i2r.a-star.edu.sg/~chiayk/publications.html>

Professional Activities

Reviewer for the following journals and conferences

- IEEE Transactions on Information Theory
- IEEE Symposium on Information Theory 2009-2013
- IEEE Transactions on Communications
- IEEE Transactions on Wireless Communications
- IEEE Transactions on Information Security and Forensics

Member, IEEE and IEEE ComSoc

Community Service

Military Service in the Singapore Army 2001 - 2003

- Served as a tank commander in Singapore Army Combat Engineers
- Served as a special projects clerk in the Operations Research Department of the Singapore Army

References

Available on request