

Wonkuk Kim

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University of South Florida *E-mail:* wkim@cas.usf.edu
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- RESEARCH INTERESTS Mixture Models, Statistical Genetics, Survival Analysis, Data Mining
- EDUCATION
 - Ph.D., Applied Mathematics and Statistics (Statistics), Stony Brook University (SUNY), 2007
 - M.S., Mathematics, Seoul National University (Korea), 1993
 - B.S., Nuclear Engineering, Seoul National University (Korea), 1989
- EMPLOYMENT
 - Assistant Professor, Mathematics and Statistics, University of South Florida Fall 2007 - Present
 - Part Time Lecturer, Mathematics, Seoul National University (Korea) Spring 1996 - Spring 1997
- TEACHING EXPERIENCE University of South Florida, Tampa, FL USA
 - STA 6208 Linear Statistical Models Fall 2007
Stony Brook University, Stony Brook, NY USA
 - AMS110 Probabilities and Statistics in the Life Sciences Fall 2003 - Spring 2007
 - AMS102 Elements in Statistics Summer 2005
 - MAT131 Calculus Spring 2001
Seoul National University, Seoul, Korea
 - Calculus Spring 1996 - Spring 1997
- COMPUTER SKILLS
 - Statistical Packages: R, SAS, Minitab
 - Languages: Fortran(77, 90, 95), C
 - Applications: Mathematica, Matlab, L^AT_EX, MS office
 - Operating Systems: Mac OS X, Unix, Windows.
- PUBLICATIONS Falk CT, Finch SJ, **Kim W**, Mukhopadhyay ND. Data Mining of RNA expression and DNA genotype data: Presentation Group 5 contributions to Genetic Analysis Workshop 15. (2007) *Genet Epidemiol [Suppl]* Accepted.
- Yang, Y., Tashman, A.P., Lee, J.Y., Yoon, S., Mao, W., Ahn, K., **Kim, W.**, Mendell, N.R., Gordon, D., Finch, S.J. Mixture Modeling of Microarray Gene Expression Data. (2007) *BMC Genetics (Supplement)*. Accepted.
- Kim, W.**, Ahn, H. and Moon, H. A Dose-Response Test via Closed-Form Solutions for Constrained MLEs in Survival/Sacrifice Experiments. (2007). *Statistics in Medicine*. **26** (3) 694-708.
- Ahn, K., Haynes, C., **Kim, W.**, Fleur, R.S., Gordon, D. and Finch, S.J. The effects of SNP genotyping errors on power of the Cochran-Armitage linear trend test for case/control association studies. (2007). *Annals of Human Genetics*. **71** (2) 249-261.
- Chi, D.P., Kim, H.J. and **Kim, W.** On the existence of solutions of the heat equation for harmonic map. (1998). *Bull. Korean Math. Soc.* **35** (3) 533-545.

DISSERTATION AND THESIS **Kim, W.** Application of Asymptotic LRTS Results to Mixture Problems in Genetic Research. (2007) Ph.D. Dissertation, Stony Brook University.

Kim, W. The Metric Entropy of Geodesic Flows on the Complete Riemannian Manifolds. (1993) Master's thesis, Seoul National University

PAPERS SUBMITTED OR IN PREPARATION Ye, Q., Cook, S.L., **Kim, W.**, Chase, G.A., Gordon, D., Finch, S.J. Null Distribution and Power Function of the Likelihood Ratio Test of Survival Distribution as Mixture of Two Exponential Components against Single Exponential. In revision.

Kim, W., Gordon, D., Sebat, J., Ye, K.Q., Finch, S.J. Power and sample size calculations for case-control association studies with copy number polymorphisms. In preparation.

Derek Gordon, Francisco De La Vega, **Wonkuk Kim** , Stephen J. Finch. Design of two-stage genetic association studies with next-generation sequencing. In preparation.

Wonkuk Kim, Laura Xuereb, Paul Adams, Kingsley Cox, Jung Yeon Lee, Stephen J. Finch. Independent component analysis with errors. In preparation.

Wonkuk Kim, Stephen J. Finch. LRTS of mixtures with known proportions. In preparation.

MEETING, WORKSHOP AND POSTER **Kim, W.**, Wang Q., Gordon D., and Finch S.J. Power and Sample Size in Genetic Association Studies in Presence of Genotyping Error (2007) Joint Statistical Meeting 2007 (in the session of "Bioinformatics and Biostatistics at the Interface" sponsored by WNAR).

Kim, W., Xuereb, L., Lee, J.Y. , Fleur, R.S., Finch, S.J. Independent component analysis with errors. (2007) Baxter Memorial Lecture Poster Session.

Yang, Y., Tashman, A.P., Lee, J.Y., Yoon, S., Mao, W., Ahn, K., **Kim, W.**, Mendell, N.R., Gordon, D., Finch, S.J. Mixture Modeling of Microarray Gene Expression Data. (2006) Genetic Analysis Workshop 15.

Kim, W. and Ahn, H. Trend Tests for Multiple-Censored Data. (2005) Baxter Memorial Lecture Poster Session.

REFERENCES

- Dr. Stephen J. Finch
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- Dr. Derek Gordon
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