

Kuan-ming Lin

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Education

Ph.D. Candidate in Computer Science and Graduate Enrollee in the Certificate Program in Computational Biology and Bioinformatics, Duke University, 2004 to present. Focus: Bayesian modeling applied to bioinformatics. Advisor: Lawrence Carin.

Master of Science, National Taiwan University (NTU), Taiwan, 2000 to 2002. Majored in Computer Science and Information Engineering (CSIE). Focus: Support Vector Machine (SVM). Adviser: Chih-Jen Lin.

Bachelors of Engineering and Science, NTU, 1996 to 2000. Double majors in CSIE and Math.

Selected Honors and Awards

Final Contestant Prize, Hewlett-Packard Taiwan IA-Design Contest, 2000.

Presidential Award, National Taiwan University, 1996 to 1998.

Bronze Medal, 37th International Mathematics Olympiad (IMO), Mumbai, India, 1996.

Research Interests

Massive biological data analysis, Bayesian modeling, data mining, cryptography, and algorithms.

Current research focuses on applying Bayesian nonparametric to clinical applications.

Selected Graduate Courses at Duke (cumulative GPA: 3.735; all from A- to A+)

Academic Writing, Advanced Databases, Bayesian Inference & Decision, CompBio Algorithms, CompBio Gene Regulations, CompBio Statistics, Complexity, Computer & Network Security, Statistical Learning.

Skills

Proficient in most DBMS (MS SQL Server, MySQL, IBM DB2), Web development (ASP, JSP, PHP, CSS, XML), and programming languages (8051 assembly, C/C++, Java, R, Matlab, PERL, Python). Adapted to brain-storming and diverse group coordination. Also an SVM expert and a skilled math problem solver.

Teaching and Employment History

TA of Software Design & Implementation in Duke CS Dept. Duration: **Spring 2006.**

TA of Introduction to Database Systems in Duke CS Dept. Duration: **Fall 2005.**

RA in Academia Sinica, Taiwan. Duration: **Jan 2004 to Aug 2004; May 2005 to Jul 2005.**

Focused on new approaches to implement concept search engines. Assisted in the implementation and extension of an on-line system that automatically trains classifiers via search engine output.

Program Design Officer in Military Service, Taiwan. Duration: **Jul 2002 to Jan 2004.**

Responsible for all IT-related tasks and the quality of network services (QoS) to one hundred users. Maintained Microsoft Active Directory, Outlook, SQL Server, Access, IIS Web server, and firewall.

TA of Statistical Learning Theory in NTU CSIE Dept, Taiwan. Duration: **Fall 2001.**

Part-time Researcher in Castles Technology, Taiwan. Duration: **Jul 2000 to Aug 2001.**

Worked in the R&D section to write USB and PS/2 drivers for Smartcard reader devices. Wrote the first Linux drivers for EZ Smartcard reader series. Gave lectures on Smartcard security functions.

Selected Publications

K.-M. Lin and J. Kang (2007). **Exploiting Inter-gene Information for Microarray Data Integration.** In *Bioinformatics Track in The ACM Symposium on Applied Computing (SAC 2007)*, pp. 123-127.

K.-M. Lin, J. Zheng, and J. Zhang (2006). **Automatic Structure Prediction of HIV Coreceptor CCR5.** *Proceedings of Bioinformatics in Taiwan Symposium (BIT 2006)*.

C.-C. Huang, K.-M. Lin, and L.-F. Chien (2005). **Automatically Training Corpora Acquisition through Web Mining.** *Proceedings of IEEE/WIC/ACM Conference on Web Intelligence (WI 2005)*.

K.-M. Lin and C.-J. Lin (2003). **A Study on Reduced Support Vector Machines.** *IEEE Transactions on Neural Networks (TNN)*, Volume 6, pp. 1449-1459.