Zhenyu Liao

website: www.zhenyu-liao.github.io email: zhenyu.liao@l2s.centralesupelec.fr

Research Interest My research interests lie primarily in machine learning, random matrix theory and high dimensional statistics.

Education

CentraleSupélec, Paris-Saclay 2016
- - present
Ph.D. in Computer Science

University of Illinois at Urbana-Champaign 2001 - 2005
Bachelor of Science in Computer Science Graduated with Highest Honors

Work Experience

Carnegie Mellon University Postdoctoral Scientist
Pittsburgh, PA 2010 – Present
Developed new online learning techniques; worked on deployment algorithms for ambulance deployment.

Google, Inc. Search Quality Analysis Intern
Mountain View, CA Summer 2009
Analysis user behavior using search traffic.

Microsoft Research Research Intern
Redmond, WA Summer 2007
Optimized ranking functions for web search.

NVIDIA Corporation Architecture Engineer Intern
Santa Clara, CA Summer 2005
Developed internal tools to assist GPU simulation and data mining.

Microsoft Corporation Software Design Engineer Intern
Redmond, WA Summer 2004
Designed and wrote a customized certificate API for authentication and data encryption.

Microsoft Corporation Software Design Engineer Intern
Redmond, WA Summer 2003
Used DirectX with HLSL to prototype imaging effects that are processed on the GPU.

Projects

An SVM Approach for Diversified Recommendations Fall 2007
Developed novel SVM approach to optimized a parameterized class of submodular functions for diversified retrieval.

An SVM Approach to Optimizing Mean Average Precision Summer 2006
Used a novel approach based on multivariate SVMs to optimize for mean average precision.

Finding Influential Blogs via Link Prediction Spring 2006
Used machine learning and link analysis techniques to determine the amount of influence blogs exert on each other.

Loss-Minimizing Voting for Machine Learning Ensembles Spring 2006
Explored voting schemes which minimizes a loss function for an ensemble of learning models.

Parameter Estimation for MRF-Stereo with Occlusions Fall 2005
Used an EM-method to iteratively compute superior parameters for the baseline MRF-stereo algorithm with occlusions.

Fast Ray Intersection Testing on GPU Fall 2004 - Spring 2005
Explored methods of fast ray intersection testing by utilizing an NVIDIA Geforce 6800.

Illini Book Exchange 2002-2005

http://www.illinibookexchange.com
Worked on development, management and marketing of Illini Book Exchange for the Technology and Management Club at UIUC.

Reflections Projections Fall 2004
http://www.acm.uiuc.edu/conference/
Helped plan and manage Reflections Projections 2004 as Treasurer of ACM @ UIUC.

Activities

Cornell Teaching Assistant (TA Excellence Award) Fall 2006
Teaching assistant for new course on social and information networks.

Cornell Teaching Assistant (TA Excellence Award) Fall 2005 - Spring 2006
Taught two sections of CS 100M during the Fall and Spring semesters of the 2005-6 academic year. Received award in recognition of performance.

UIUC ACM Treasurer Fall 2004 - Spring 2005
Managed all financial responsibilities of local chapter of ACM. Assisted the Chair in general management of ACM.

UIUC ACM SIGGRAPH Chair Spring 2004
Managed the local chapter of SIGGRAPH, organized projects and workshops/tutorials