

# Dawen Xie

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## Education

- M.S. in Computer Engineering**, Texas A&M University, College Station, TX August, 2007  
Thesis: Design and Implementation of a Departmental Information Management System
- B.S. in Computer Science**, Nankai University, Tianjin, China June, 1999

## Professional Experience

- Information Technology Specialist II**, Department of PPWS, Virginia Tech 01/07 – Present
- Graduate Assistant**, Department of Computer Science, Texas A&M University 11/05 – 01/07

- Working as the lead developer, project manager (manage two other graduate assistants and one undergraduate programmer) and database administrator for a departmental information management system. The goal for this system is to move all operations within the department on-line. It includes five main applications: graduate admission (application submission, reference letter submission, review and notification), graduate student tracking, annual Ph.D. review, faculty search and financial support tracking. In the first year, the system was used by over 9000 users.
- Working with departmental Computer Support Group (CSG) on system administration for some web servers.

- Research Assistant**, Department of Computer Science, Texas A&M University 09/02 – 11/05

- Designed and implemented “the Protein Folding Server” (joint work with two other graduate students). This server is a web application that uses a new computational technique developed in Parasol lab to map a protein’s potential landscape. It generates transitional motions of proteins according to user’s requests.
- Proposed a framework which automatically determines an appropriate roadmap size for a given motion planning problem. Worked on motion planning problem for systems with closed kinematics chains and its applications.

- Research Assistant**, Department of Computer Science, Nankai University, Tianjin, P. R. China 09/99 – 02/01

- Worked on different projects in E-commerce.

## Computing Experience

**Programming Languages:** C/C++, Visual Basic, Perl, Assembly

**Web and Database:** PHP, HTML, Javascript, MySQL, SQL, Apache

**Operating Systems:** UNIX and UNIX-like (CentOS, IRIX, Linux, Solaris), Windows in all its versions

## Publications in Refereed Conferences

“Incremental Map Generation (IMG)”, Dawen Xie, Marco A. Morales A., Roger Pearce, Shawna Thomas, Jyh-Ming Lien, Nancy M. Amato, in *The Seventh International Workshop on the Algorithmic Foundations of Robotics*, Jul 2006, to appear.

“Iterative Relaxation of Constraints: A Framework for Improving Automated Motion Planning.” Burchan Bayazit, Dawen Xie, and Nancy M. Amato, in *Proceedings of the 2005 IEEE/RSJ International Conference on Intelligent Robots and Systems*, pp.586-593, Sep 2005.

“A Kinematics-Based Probabilistic Roadmap Method for High DOF Closed Chain Systems.” Dawen Xie and Nancy M. Amato, in *Proceedings of the 2004 IEEE International Conference on Robotics and Automation*, pp. 473-478, Apr 2004.

## Public Service

- President**, A&M International Fellowship 09/03 – 08/05