

CAO Song, CV

[Education](#) | [Honors and Awards](#) | [Professional Activities](#) | [Journal Papers](#) | [Conference Papers](#) | [Leadership Experiences](#) | [Volunteer Activities and Community Engagement](#) | [Other Extracurricular Achievements](#)

Research Interests:

- Computer Vision
- Robotics, Human-Computer Interaction
- Computer Graphics & Computer Aided Design

Education:

- Bachelor of Engineering in Computer Software, Tsinghua University, Beijing, July 2008
(GPA 92.1/100, Grade Ranking 2/52)

Honors and Awards:

- Excellent Graduate, Tsinghua University, 2008
- Tsinghua Academic Excellence Scholarship, 1st Prize(Mitsubishi UFJ Scholarship), 2007
- Tsinghua Comprehensive Excellence Scholarship, 2nd Prize (IBM Scholarship), 2007
- Tsinghua Comprehensive Excellence Scholarship, 1st Prize (Toyota Scholarship), 2006
- Tsinghua Comprehensive Excellence Scholarship, 1st Prize (POSCO Scholarship), 2005
- 1st Prize of National Physics Competition for College Students, 2005
- 2nd Prize of Chinese Physics Olympiad, 2003
- 3rd Prize of Chinese Chemistry Olympiad of Hubei Province, 2003
- 1st Prize of National English Proficiency Competition for Senior High School Students, 2002
- 2nd Prize of Math Competition of Hubei Province for Junior High School Students, 2001
- 1st Prize of National Chemistry Competition for Junior High School Students, 2001
- 2nd Prize of National Oral English Competition for Junior High School Students, 1998

Professional Activities:

- Visual locating and tracking of object for a mobile robot, September 2008 to present, Beijing
- Extraction of Multiple Motion Trajectory from Video and its Application to CBVR (Content-based Video Retrieval) and CBCD(Content-based Copy Detection), March 2008 to present, Beijing
- Optimization of Aircraft Scheduling and Path Planning, April 2008 to present, Beijing
- Frequent Pattern Mining Algorithms Research, August 2007, Beijing
- Research on Calculating Physical Properties and Designing Prescriptions for Chalcogenide Glasses, February 2007, Xiangfan, Hubei Province
- Research on Approximate Computation of Curves on B-spline Surfaces, October 2006 to October 2007, Beijing
- Social Security System Survey, January 2006, Xiangfan, Hubei Province
- Research on Search Engine Improvement Through Implicit User Feedback, October 2006, Beijing
- Research on Algorithms of Finding Smallest Enclosing Ball, June 2005, Beijing

Journal Papers:

- YANG Yijun, **CAO Song**, YONG Junhai, ZHANG Hui, Jean-Claude PAUL, SUN Jianguang: Approximate computation of curves on B-spline surfaces. Computer-Aided Design, Volume 40, Issue 2, February 2008, Pages 223-234.
- **CAO Song**, HU Xiangping: A Delphi Program for Calculating Physical Properties and Designing Prescriptions for Chalcogenide glasses, Optics & Optoelectronic Technology, Vol.5, No.4, 2007.

Conference Papers:

- FANG Cunhao, **CAO Song**: A Practical Agent-Based Approach for Pattern Layout Design, Computer Aided Systems Theory – EUROCAST 2007, Springer LNCS, Volume 4739/2007, Pages 1223-1228.
- FANG Cunhao, ZHANG Yaoyue, **CAO Song**: A Resources Virtualization Approach Supporting Uniform Access to Heterogeneous Grid Resources, Computer Aided Systems Theory – EUROCAST 2007, Springer LNCS, Volume 4739/2007, Pages 481-487.

Leadership Experiences:

- Class Leader (Monitor), Sep. 2007 to Jul. 2008
- President of Tennis Association of Tsinghua University, Sep. 2006 to Sep. 2007
- Captain of Tsinghua Tennis Team, Oct. 2006 to Oct. 2007

Volunteer Activities and Community Engagement:

- Served as "Information Service" Volunteer in "China Open 2007", Sep. 2007
- Served as "Campus Guide" Volunteer in Tsinghua University, Oct 2006
- Member of Volunteer Association of THSS (School of Software, Tsinghua University), Oct. 2006 to Jul. 2008
- Served in Communication and Study Department of THSS Student Union, Oct. 2004 to Jun. 2006

Other Extracurricular Achievements:

- Ranked 3rd in the Men's Single of Ma Yuehan Tennis Cup, Apr. 2008
- Ranked 3rd in the Group Competition of Ma Yuehan Tennis Cup, Apr. 2006 & Apr. 2007
- Attended Tsinghua social practice researching on the problem of current social security system, Jan. 2006
- Made a successful finish in the ANA Beijing International Marathon (half marathon), Oct. 2005
- 1st Prize of Painting and Calligraphy Exhibition for Children in Xiangfan City, Hubei Province, Feb. 1998
- 2nd Prize of Golden Globe Awards of National Painting and Calligraphy Contest for Teenagers, Jan 1998
- Scored "Excellence" of Level 5 in Professional Accordion Proficiency Test and was awarded the membership of Musicians Association of Hubei Province, Oct. 1993