# Wen Sang

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#### **EDUCATION**

## Massachusetts Institute of Technology (MIT)

PhD, Mechanical Engineering, School of Engineering

Jun. 2013

Cambridge, MA

• GPA: 4.4/5. GRE Quantitative: 800 (2009).

- Research: Exploring high efficiency & low emission auto-engine combustion technology via experiments on combustion research devices, quantitative analysis, and product engine tests.
- Business relevant courses taken: Macroeconomics (14.002), New Enterprise (15.390).

**Tongji University** 

Shanghai, China

MSc, Power Machinery Engineering, School of Automotive Studies

Jun. 2010

GPA: 86.44/100 (top 5%).

- Lord (American) Graduate Students Scholarship, Tongji University, 2009, top 5%.
- Level A Graduate Students Academic Scholarship, Tongji University, 2008, 09, and 10, top 25%.

## Nanjing University of Aeronautics and Astronautics (NUAA)

Nanjing, China

BSc, Automotive Engineering, College of Energy and Power

Jun. 2008

- GPA: 3.6/4.5 (top 5%).
- National Scholarship for College Students in China, 2007, top 5%.
- President Award of Nanjing University of Aeronautics and Astronautics, 2006, top5%.

#### **RESEARCH & TEACHING**

## Sloan Automotive Lab, MIT

Cambridge, MA

Research Assistant

Sep.2010 - Present

- Advancing the high load limit expansion techniques for HCCI combustion on auto-engines.
- Quantified the effects of dilutions on HCCI combustion into 3 equations with 1000 explosion tests on a combustion research device. Attained a fundamental hypothesis.
- Designed and built a HCCI combustion experimental system with a production engine.
- Currently testing the fundamental hypothesis on the designed system with 12 monitored parameters to reach 2 compromising goals. Achieved 45% improvement of the high load limit.

## Department of Mechanical Engineering, MIT

Cambridge, MA

Teaching Assistant

Sep.2011 - Dec.2011

- "General Thermodynamics" (high-level graduate student course).
- Lectured recitation class (3 hours/week), offered office hour mentoring (2 hours/week), and graded weekly problem sets for 38 peers.
- Rated general score of 5.8/7 by students via MIT's course evaluation system.

#### School of Automotive Studies, Tongji University

Shanghai, China

Research Assistant

Mar.2009 - Aug.2010

- Mechanism study of ion current sensing on HCCI combustion.
- Numerically simulated the physical & chemical processes inside engine cylinders by integrating experiment data into combustion and thermodynamics models.
- Achieved quantitative explanation for the physical and chemical mechanisms of the above sensing technology with maximum 1.5% error to experiments.

#### **LEADERSHIP & TEAM WORKING**

## **MIT Ventureships Club**

Cambridge, MA

President, Co-founder

May 2012 - Present

 Offering real-world start-up working opportunities to MIT students by collaborating with the MIT Venture Mentor Service Office and matching up start-ups with interested students via consulting style projects.

- Co-founded the group, wrote the constitutional documents, recruited a 15-person executive team, received over 200 MIT students subscriptions, and selected 4 out of 13 well established start-up applicants for fall 2012.
- Initiating the MIT Mid-Term Venture Mixer (200 people) among students, start-ups, venture capitals and incubators on Nov.7, 2012, collaborating with MIT Entrepreneur Center and others.

## MIT Chinese Students and Scholars Association (CSSA)

Cambridge, MA

Vice president

May 2012 - Present

- Initiating the MIT Asian Career Fair from ground up, expecting top 50 Asian employers and 2000 MIT students in April 2013.
- Recruited a 50-person operation team, wrote up constitutional documents. Now collaborating with MIT Global Education & Career Development Office and MIT Student Activities Office.

Tongji University School of Automotive Studies Graduate Student Union Shanghai, China President Sep. 2008 - Aug. 2010

- Leader of the graduate student union class 2010 (120 people).
- Organized over 20 academic and social events, won over 5 awards with the class of 2010 graduate students, e.g. Champion of the 2008 Soccer League Match of Tongji University.

## **NUAA Mathematical Modeling Club**

Nanjing, China

President

Sep. 2005 - Sep. 2006

- Leader of the club for enthusiasts of mathematical modeling skills and competitions.
- Organized the 2006 NUAA Mathematical Modeling Competition, which engaged 22 teams and over 300 people working on 8 different problem sets.

#### **SELECTED COMPETETIONS**

## **China University Student Business Start-up Competition** Different roles

Shandong, China

Oct. 2006

- Planned a business start-up with 9 partners based on a novel manufacturing technology for rock cutting diamond tools.
- Won National 1st Prize serving as technology interpreter, marketing analyst, and team coordinator during the yearlong venture with a dynamically changing team.

# **China University Students Mathematical Modeling Contest**

Nanjing, China Sep. 2006

Alaorithm Designer

- Given tons of fragmental clinic test data, work with 2 partners to compare the effect of different therapies for different patient groups.
- Built a privilege-weighted decision-making model, tested the model with data, and wrote a journal style paper. Won the 3<sup>rd</sup> place award in the Jiangsu contest zone.

## Mechanical Design Contest for College Students in Jiangsu Chief Architect

Nanjing, China Apr. 2006

Led three senior students in mechanical design and robotics, designed and built a medical device for arthritis healing. Won the 3<sup>rd</sup> place prize.

#### **SKILLS&EXPERIENCES**

- Skills: Chinese; scientific data processing & presenting; office software (spreadsheet etc.); C, MATLAB programming; basic mechanical fabrication; basic electrical knowledge.
- Venture Founder: smarking----mobilized parking space-positioning system, since May 2012.

#### **MORE ABOUT ME**

- Running after work everyday since Jul. 2011- training for a half marathon.
- Dinghy sailing on Charles River since Jul. 2011; recreational rowing since Jun. 2012; X dimension sailing in Boston Harbor since Aug. 2012.
- Member of MIT Flying Club, flying sport aircraft with experienced pilots.