

# Yuanyuan Cui

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## EDUCATION

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**Massachusetts Institute of Technology (MIT), Cambridge, MA**

**Feb. 2013**

Candidate for Ph.D. in Computational & Systems Biology. GPA: 4.6/5.0

**Uppsala University, Uppsala, Sweden**

**July 2007**

Master of Science in Bioinformatics. GPA: 5.0/5.0, rank 1.

**Tsinghua University, Beijing, China**

**July 2005**

Bachelor of Science in Biological Sciences. GPA: 87/100; TOEFL: 634; GRE Verbal 470, Quantitative 800, Writing 4.5.

## PROFESSIONAL EXPERIENCE

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**Computer Science and Artificial Intelligence Lab, MIT, Cambridge, MA, *Research Assistant***

**Jan. 2008 - present**

- Designed computational models which help NIH increase their clinical trial success rate. This project was a collaboration with consultants from Booz Allen Hamilton and has a potential to save millions of dollars for cancer drug clinical trials
- Built and optimized ordinary differential equation models for metabolic networks, which served as a powerful tool for drug target discovery and biofuel production improvement
- Re-engineered an enzyme to create the function of degrading hazardous chemicals

**Arcbazar.com Inc., Cambridge, MA, *Student Consultant***

**Jan. 2012 – Feb. 2012**

- Collaborated with a team to analyze market size and design strategies to increase the client's customer base from 30 to 500
- Designed and implemented a survey for potential customers, which provided critical insights for the marketing strategies

**Drug Discovery Department, Amgen Inc, South San Francisco, CA, *Graduate Intern***

**July 2011 – Sept. 2011**

- Identified 52 novel cancer genes based on computer algorithms of machine learning; one of the genes was carried on to the process of drug development and the rest are under further examination for drug targeting opportunities

**Linnaeus Centre for Bioinformatics, Uppsala University, Uppsala, Sweden, *Research Assistant***

**Oct. 2005 - June 2007**

- Optimized models to predict protein and drug interactions which reduced time and cost for new drug screening
- Developed tRNA identity classification software TFAM to identify initial tRNA, which was a breakthrough in the field

**Lab of Structural Biology, Tsinghua University, Beijing, China, *Research Assistant***

**July 2004 - July 2005**

- Crystallized a cancer-related protein, which led to new knowledge of cancer pathways

## LEADERSHIP

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**Co-founder and Director, MIT-China Innovation & Entrepreneurship Forum, Cambridge, MA**

**Feb. 2011 – present**

- Campaigned to MIT senior officers including Chancellor, Provost, and Deans of each school and raised \$10k+ seed fund
- Led the sponsorship team (10 people) to secure \$60k+ in funding from US and Chinese companies for the 1<sup>st</sup> annual conference (~700 attendees) in 2011; oversee marketing team (15 people) for branding and promoting the 2<sup>nd</sup> annual conference in 2012 via 10+ media groups, social networks, and professional associations

**President, MIT Chinese Students & Scholars Association, Cambridge, MA**

**May 2009 - May 2010**

- Led the association with 700+ members to promote and celebrate Chinese culture, encourage US-China cultural conversations, connect Chinese companies with MIT students for career development
- Organized 50+ events, including cultural information and career seminars, networking retreats, community services, and a joint Chinese Spring Festival Gala (1200 attendees) with Harvard and 11 other Boston area universities

**Chief Editor, Tsinghua University General Broadcast Station, Beijing, China**

**Sept. 2002 - Jan. 2005**

- Supervised a team of 60 editors to run 10 daily radio programs, ranging from school life to celebrity interviews
- Improved the average rating of the broadcast station by 50% and reached an audience of 5000 students

## **PUBLICATIONS**

- Freyhult E, Cui Y, Nilsson O, Ardell DH. New computational methods reveal tRNA identity element divergence between Proteobacteria and Cyanobacteria. *Biochimie*. 2007 Oct;89(10):1276-88. Epub 2007 Jul 31.
- Tåquist H, Cui Y, Ardell DH. TFAM 1.0: an online tRNA function classifier. *Nucleic Acids Res*. 2007 Jul;35(Web Server issue):W350-3. Epub 2007 Jun 25.

## **BUSINESS CLASSES AUDITED**

- Technology Sales and Sales Management (MIT course number: 15.387)
- Marketing Management (MIT course number: 15.812)
- Strategic Decision Making in the Biomedical Business (MIT course number: 15.363)

## **AWARDS AND SCHOLARSHIPS**

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|---|--------------------------------|
| • Scholarship for PhD students in CSBi, MIT                       | <b>Sept. 2007 - May 2009</b>   |
| • Fellowship for outstanding Master student in Uppsala University | <b>Sept. 2005 - July 2007</b>  |
| • Fellowship for outstanding students, Tsinghua University        | <b>Sept. 2003 - Sept. 2004</b> |

## **COMPUTER SKILLS**

- C++, MATLAB, R, Perl, Python, SQL

## **ACTIVITIES**

- Developing an iPhone app for social event posting with two MIT students
- Member of MIT Consulting Club since 2011
- Participated in the organization team for 2011 MIT energy conference
- Led a workshop in 2010 MIT women's leadership conference
- Invited to attend Kairos Global Summit for entrepreneurship and leadership
- Invited as VIP for Annual Conference of Sino-American Pharmaceutical Professionals Association
- Traveled to 50+ major cities from fourteen countries of Asia, Europe, and America during the past seven years