

# Song XIE

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## Education

2008--2012 **B.S. in Computer Science**, *Huazhong University of Science and Technology(HUST)*,  
(expected) Wuhan, P.R.China.

General GPA: 86.10/100, ranked top 10% in 389 students.

Major GPA: 87.69/100, ranked top 5% in 389 students.

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## Experience

- 2011 **Research Intern**, *Microsoft Research Asia*, Beijing.  
Developed a client of a vertical search engine TravelGuide<sup>1</sup> on Windows Phone 7.
- 2011 **Team Leader**, *Mathematical Contest in Modeling*, HUST.  
Responsible for information collecting, programming, paper writing and typesetting.
- 2010 **Developer**, *Windows Phone 7 Pioneer Program*, Microsoft Research Asia.
  - Developed an application for Window Phone 7 providing book information including prices by scanning the barcode on the back cover of books.
  - Responsible for Web Service using *Django* in *Python* deployed on *Google App Engine*.
- 2010 **Designer**, *Microsoft Elite Challenge*, Microsoft Research Asia.
  - Developed an electronic receipt system in order to reduce paper wasting.
  - Using Windows Phone 7 as client with *QRCode Recognition* technology and a Web Service using *WCF*.
  - Responsible for designing the architecture of the system.
- 2010 **Developer**, *Jachin ODBC driver*, TopCoder Inc..  
Extended the ODBC driver's connectivity module to support *SOAP* and *IBM XMS* protocol.
- 2009 **Team Leader**, *ACM-International Collegiate Programming Contest*, HUST.  
Responsible for *Data Structure*, *Dynamic Programming*, *Combinatorics*, *Game Theory*, and *Number Theory*.

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## Awards & Honors

- 2010-2012 **Outstanding Student Award**, Huazhong University of Science and Technology.  
Granted to top 1% students among 32,000 undergraduates.
- 2011 **Excellent Intern Award**, Microsoft Research Asia.
- 2011 **Honorable Mention**, *Mathematical Contest in Modeling*, Consortium for Mathematics and Its Applications.
- 2011 **Second Prize(3rd place)**, *2nd Hengsheng Cup HUST Programming Contest*.
- 2011 **Excellent Innovation Award**, *Microsoft Student Challenge*, Microsoft Research Asia.
- 2011 **Third Prize**, *Alibaba Cup ACM Programming Contest*, HUST Site.
- 2010 **Excellent Student Scholarship**, HUST, 30 out of 500 students, 6%.
- 2010 **200th Place**, *Youdao Nanti NetEase Programming Contest*, NetEase Inc..
- 2009 **Innovation Scholarship**, HUST, 10 out of 500 students, 2%.

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<sup>1</sup><http://travel.msra.cn>

- 2009 **Gold Medal**, *ACM-International Collegiate Programming Sub-Regional Contest, Central South-China Site*, Hunan University.
- 2009 **Bronze Medal**, *ACM-International Collegiate Programming Contest, Asia Regional, Wuhan Site*, Wuhan University.
- 2009 **Bronze Medal**, *ACM-International Collegiate Programming Contest, Asia Regional, Shanghai Site*, Fudan University.
- 2009 **Third Prize**, *10th Scientific Festival, HUST SeedPK Programming Contest*.
- 2009 **Third Prize**, *5th HUST Programming Contest*.
- 2008 **Third Prize**, *9th Scientific Festival, ACM HUST Programming Contest*.

## Selected Undergraduate Course Projects

- 2011 **Processor implemented on FPGA**, Computer Organization Course Project.
  - A processor supporting MIPS-like ISA with 5-stage *pipeline* in *Verilog*.
  - Got a score of 99, ranked first among the 389 students.
- 2011 **Linux driver & system monitor**<sup>2</sup>, Operating System Course Project.
  - Developed a character-based pseudo-device driver for Linux.
  - Developed a system monitor interpreting `/proc` in Linux, using *PyGTK* and *PyCairo* for GUI.
  - Got a score of 98, ranked first among the class.
- 2010 **AI for Reversi Game**<sup>3</sup>, Data Structure Course Project.
  - Developed a Reversi Game program with GUI coded in *Python* and AI coded in C.
  - Using *SWIG* as the interface between Python and C.
  - Got a score of 98, ranked first among the class.

## Skills

Algorithm	ACM/ICPC-level algorithmic problem-solving.
Machine Learning	Linear regression, logistic regression, naïve bayse, neural network, support vector machine, and k-means cluster.
Software Developing	Understand general principles in software design. Familiar with common design patterns and unit test frameworks in Python and C#.
Language	C, C++, Python, C#, assembly, Octave, MATLAB, Mathematica, HTML, CSS, Bash, Scheme, Emacs Lisp, COBOL and assembly on IBM Mainframe.
Platform	Linux, Mac OS X, Windows and z/OS on IBM Mainframe.
IDE	Emacs on all platforms, and Visual Studio on Windows.
Certificate	Advanced Level COBOL Programming Language, and Advanced Level Mainframe Operating System, from IBM.
Typography	Familiar with typesetting in $\text{\LaTeX}$ , and graphics drawing in PGF & TikZ.
General	Excellent self-study and quick learning skills, as well as effective communication skills.

## Standard Tests

TOEFL iBT	<b>106</b>	Reading: 29, Listening: 26, Speaking: 24, Writing: 27 Date: Feb 20, 2011
GRE(General)	<b>1290, AW: 4.0</b>	Verbal: 490, 58%, Quantitative: 800, 94%, Analytical: 4.0, 48% Date: Jun. 11, 2011

<sup>2</sup><https://github.com/aifreedom/HUST-OS-Course-Project>

<sup>3</sup><https://github.com/aifreedom/PyIagno>