# **Curriculum Vitae**

# **LIU Gang**

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# Languages

Chinese (native); English (fluent both in speaking and writing) Some Cantonese and Japanese

#### **Research Interests**

e-Trade/Finance, artificial intelligence approaches to computer security and privacy, web document analysis, information retrieval, and natural language processing

data mining, machine learning mobile toolkit development

#### **Education**

Sep. 2010 – Mar.2011	Visiting	School of Computer Science, Carnegie Mellon University, Pittsburgh, USA	
	Scholar	Advisor: Prof. Jason I. Hong	
Oct. 2007 – Present	Ph. D	Dept. of Computer Science, City University of Hong Kong, Hong Kong	GPA: 3.82/4.0
		Advisor: Dr. LIU Wenyin	
Sep. 2001 – Jul. 2003	B. Eng	School of Software, Tsinghua University, Beijing, China	GPA: 87/100
		Major: Computer Science and Technology	
Sep. 1994 – Jul. 1998	B. Eng	Dept. of Business Administration, Xi'an University of Technology, China	GPA: 85/100
		Major: Industrial Foreign Trade	

# Work/Intern Experience

Oct. 2007 – Oct. 2009	Department of Computer Science, City University of Hong Kong	Research Assistant
Jul. 2003 - Aug. 2007	China International Electronic Commerce Center, MOFCOM, Beijing, China	Technical Manager
Feb. 2003 – Jun. 2003	Hewlett-Packard Japan, Ltd, Tokyo, Japan	Internship
Oct. 2002 – Feb. 2003	Hitachi Software Engineering Co. Ltd, Tokyo, Japan	Internship
Jan. 1999 – Aug. 2001	Shaanxi Metals & Minerals International Trade Co., Ltd, Xi'an, China	<b>Business Assistant</b>

## **Publication**

- Liu Wenyin, Gang Liu, Bite Qiu, Xiaojun Quan. Anti-phishing by Discovering Phishing Target. IEEE Internet Computing, 2011, DOI: 10.1109/MIC.2011.103.
- Haijun Zhang, Gang Liu, Tommy W.S. Chow, Liu Wenyin. Textual and Visual Content-based Anti-phishing: A
  Bayesian Approach. IEEE Transactions on Neural Networks, 2011, DOI: 10.1109/TNN.2011.2161999.
- Gang Liu, Guang Xiang, Bryan A. Pendleton, Jason I. Hong, and Wenyin Liu. Smartening the Crowds: Computational Techniques for Improving Human Verification to Fight Phishing Scams. *Proc. 7th Symposium on Usable Privacy and Security*, Pittsburgh, July 20-22, 2011.
- Gang Liu, Zhi Lu, Tianyong Hao, and Liu Wenyin. Automatic Short Text Annotation for Question Answering System. Lecture Notes in Business Information Processing, volume 75, pages 245-258, 2011.
- Gang Liu, Bite Qiu, and Liu Wenyin. Automatic Detection of Phishing Target from Phishing Webpage. Proc. 20th International Conference on Pattern Recognition, pp. 4153-4156, Istanbul, Aug. 23-27, 2010.
- Gang Liu, Zhi Lu, Tianyong Hao, and Liu Wenyin. Automatic Text Annotation for Questions. Proc. 6th International Conference on Web Information Systems and Technologies, Valencia, Apr. 7-10, 2010. (Best Student Paper Award)
- Xiaojun Quan, Gang Liu, Zhi Lu, Xingliang Ni, and Liu Wenyin. Short Text Similarity Based on Probabilistic Topics.
   Knowledge and Information Systems, volume 25, issue 3, pages 473-491, December 2010.
- Liu Wenyin, Ning Fang, Xiaojun Quan, Bite Qiu, Gang Liu. Discovering Phishing Target Based on Semantic Link Network. Future Generation Computer Systems. Vol. 26, No. 3, pp 381-388, March 2010.
- Shengguang Meng, Wei Chen, Gang Liu, Shitong Wang, and Liu Wenyin. An Asset Management System Based on RFID, WebGIS and SMS. Proc. 2nd International Conference on Ubiquitous Information Management and Communication, pp. 82-86, Suwon, Jan. 31-Feb. 1, 2008.
- Anthony Y. Fu, Danxia Lin, and Gang Liu. Neural Network Enhanced Sound Source Localization Model for Mobile Terminals. Proc. 10th Conference on Artificial Intelligence and Applications, TAAI2005, Kaohsiung, Dec. 2-3, 2005.

## **Project Experience**

Sep. 2008 – Present SiterWatcher Serials

- A series of commercial products for anti-phishing.
- Its end-user version has more than 45,000 downloads, its service version at <a href="www.SiteWatcher.cn">www.SiteWatcher.cn</a> has received more than 30,000 queries, and its enterprise version has been sold two licenses.
- This project has also been widely reported in local media, including Cable TV and Sing Dao Daily.
- Worked as designer, key developer and tester.

#### Mar. 2009 – Aug. 2009 EmailWatcher

Advisor: Dr. LIU Wenyin

Advisor: Dr. LIU Wenvin

- EmailWatcher is a plug-in Email filter for Microsoft Outlook to check all suspicious URLs in emails received and analyze
  the webpages to which these suspicious URLs point so as to identify whether they are phishing or not.
- Downloaded at <a href="http://www.cs.cityu.edu.hk/~liugang/emailwatcher.rar">http://www.cs.cityu.edu.hk/~liugang/emailwatcher.rar</a>.
- Personal completed project.

#### Jun. 2008 – Nov. 2008 Question Recommendation on Buyans.com

Advisor: Dr. LIU Wenyin

- www.BuyAns.com is a user-interactive question answering system using semantic patterns to ask and answer.
- It automatically recommends a new question to suitable users to answer.
- Worked as designer, key developer and tester.

#### Aug. 2007 – Oct. 2007 Mobile Software: City Attractions Guide for Beijing Tourists

- It is a mobile traveling guide specially designed for the convenience of smart phones (such as Nokia, Motorola, Sony-Ericsson, Blackberry and etc.).
- It covers five must-visit attractions in Beijing, and they are Imperial Palace, Temple of Heaven, Summer Palace, Great Wall, and Beihai Park.
- A full range of tourist information about each attraction, including airscape, history, map, opening time, travailing routes, and major sights, are provided.
- Personal completed project and promoted by my friend's company.
- Downloaded at:

http://www.handango.com/catalog/ProductDetails.jsp?storeId=2218&deviceId=914&platformId=20&productId=219028

#### Aug. 2007 – Oct. 2007 Mobile Software: i-Phrase Chinese

- It is the first mobile-based audio and visual phrasebook specially designed for tourists in China.
- More than 390 phrases that cover virtually any situation.
- Phrases are displayed in forms of English, Chinese characters, and pinyin.
- Full support to Symbian and Blackberry.
- Key developer and promoted by my friend's company.
- Downloaded at:

http://www.handango.com/catalog/ProductDetails.jsp?storeId=2218&deviceId=914&platformId=20&productId=220014

# Jan. 2006 – Aug. 2007 Electronic Trade Finance Project

- Studied the progress of global paperless trade and do the pilot cases with relative organizations from Hong Kong, Chinese Taipei, Macao, Korea, Japan, Malaysia, Singapore, and Thailand.
- Investigated in Dalian port and Qingdao port.
- Studying the need of participants of international trade such as foreign trade, banks, and logistic companies.
- Wrote the technical documents of business research.
- In charge of the system analysis and technical structure design.
- Leaded the technical group to develop the function of project.
- Communicated with other third part service providers to kick off the project.
- Worked as technical manager.

#### Jan. 2006 – Aug. 2007 Model-Deploy on e-Trade/Finance Service Platform

- Participated and was responsible for the project task of "Model-Deploy on e-Trade/Finance Service Platform" assigned by Beijing Science and Technology Committee.
- As a technical field principal, mainly in charge of the realization of technical framework of the platform.
- In charge of the realization of the platform system inter-net with other trade-related participants, as well as the inter-link
  with the overseas third party trade/ finance platform.
- Worked as technical manager.

# Nov. 2003 – Dec. 2006 Pan Asia e-commerce Alliance(PAA) electronic business documents exchange Project

- As a member of PAA workgroup to kick off the pilot project.
- Base on the framework of ebXML.
- Charged module of requirement analysis, design, coding and test.
- Participated in designing standardization of electronic business documents.
- Charged joint test with other members from Korea, Japan, Singapore, Malaysia, Thailand, Hong Kong, Chinese Taipei, and Macao.
- Worked as technical manager.

### Nov. 2004 – Mar. 2005 Online Chinese Export Commodities Fair Project

- Environment of development: MVC framework, Apache Web Server, OC4J Application Server, Database Oracle 9i.
- Proceeded coding with Struts, Hibernate, Spring Session Bean, and jsp.
- Participated in requirement analysis, design of system, in charge of developing module of Tradelead, Business Partner, Business Message, Online Enquiry and Online Quote.
- Worked as technical manager.

## Jan. 2004 – Feb. 2004 Web of commercial department of Hainan Province

- Environment of development: J2EE platform, Tomcat Web Server, Oracle 9i.
- Proceeded coding with Servlet, JavaBean, JavaScript, jsp.
- Charged module of requirement analysis and design.

Worked as technical manager.

# Nov. 2003 – Jan. 2004 Web of bizmatching.mofcom.gov.cn

- Environment of development: J2EE platform, Tomcat Web Server, Oracle 9i.
- Proceeded coding with Servlet, JavaBean, JavaScript, jsp.
- Charged module of requirement analysis, design, coding and test.
- Worked as technical manager.

# Jul. 2003 – Dec. 2003 Safe e-Exchange System for Cross-Border Logistics and Commercial Documents

- Participated in one of the key hi-tech project tasks enlisted in the Tenth National 5th Year-plan, which was named as "safe e-Exchange System for Cross-Border Logistics and Commercial Documents".
- Worked for the realization of the cross-border e-document transmission system.
- Worked as system analyst.

# Sep. 2003 – Nov. 2003 Web of CNEEC

- Environment of development: J2EE platform, Tomcat Web Server, Oracle 9i.
- Proceeded coding with Servlet, JavaBean, JavaScript, jsp.
- Charged module of requirement analysis, design, coding and test.
- Worked as senior software engineer.

#### Feb. 2003 – April. 2003 NTT's CODEN Project: COCOA (the Electronic Information System of the Individual)

- Built the Bea Weblogic platform and set the related environmental parameters.
- Under the environment of J2EE, coded the middle ware of the business using the technology of EJB.
- Writing the testing specification, under Solaris system proceeded code testing and finished testing report.
- Worked as key programmer and software test engineer.

#### Nov. 2002 – Jan. 2003 UFJ Bank's Project: Management of Account System

- Using thought of UML, participated in the design of the classes of module of bill export and print.
- Proceeded coding with Java and Java Servlet.
- Worked as key programmer.

# Mar. 2002 – Jun. 2002 Curriculum-Selecting System for School

- Applied J2EE Specification with Bea Weblogic platform and used MVC mode.
- Adopted the thoughts of software engineering from the requirement to the test.
- Worked as the team lead of the four-people developing group.

#### May 2002 – Jul. 2002 FTP tool (client-side and server-side)

- Function: upload, download, browse, change directory, check current directory, and etc.
- Under Linux system, proceeded coding with C++ using the tool of KDeveloper.
- Personal completed project.

## **Honors and Awards**

2010 - 2011	Research Tuition Scholarship of City University of Hong Kong
2009 - 2011	Postgraduate Studentship of City University of Hong Kong
2001 - 2002	Third-class Scholarship of Tsinghua University
1998	Excellent Graduate of Xi'an University of Technology
1997	National Rank of Certificate of Computer Software Certified Programmer
1994 - 1998	Second-class Scholarship of Xi'an University of Technology

# **Teaching Experience**

CS2363 Computer Programming CS5290 Digital Rights Management

# **Computer Skills**

Operating System Windows, Linux

Programming Languages Java, C#, C++, Delphi, Python

Programming IDE Microsoft Visual Studio .Net, Eclipse, Jbuilder

Database MySql, SQL Sever, Oracle

 $Software\ Engineering\ \&\ Architect \qquad UML\ and\ Rational\ Rose,\ OOD\ methodology,\ J2EE,\ J2ME,\ EJB,\ MVC,\ Spring,\ Struts,$ 

and Hiberante

### **Extracurricular Activity**

1996 – 1998 Deputy President of the Studying Department of Student Union

1995 – 1998 Announcer of English program

# **Personal Characteristics**

- Well understanding of team spirit, strong communication capability, good at pioneer and creative mind, capable of pattern study.
- Able to endure hardship, with gentle character, quite modest, self-disciplined, filled with confidence.
- Love I Ching, Tao Teh Ching, ancient poetries, sports, music and tourism.