

Qian Chen

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Education

- 2011 – 2015 (expected) **PhD Candidate**, Computer Science, Hong Kong Baptist University, Hong Kong.
Advisors: Prof. Jianliang Xu, Dr. Haibo Hu
- 2007 – 2011 **BS**, Computer Science and Technology, East China Normal University, China.

Experience

- 2011 – present **Graduate Research Assistant**, *Hong Kong Baptist University*, Hong Kong.
- Conducted research on location-based services, authenticated queries, spatial databases and privacy-preserving techniques with Prof. Jianliang Xu and Dr. Haibo Hu.
 - Designed the novel private comparison techniques (state-of-the-art), and proposed efficient indexes and light-weight authentication algorithms for widely used spatial queries.
 - Published peer-reviewed top conference papers about the research results.
- 2011 – present **Teaching Assistant**, *Hong Kong Baptist University*, Hong Kong.
- Gave tutorials for courses titled "Software Engineering", "Databases System", "Java Programming" and "Computer and Network Security".
 - Awarded as *Excellent Teaching Assistant* of the department in 2012 – 2013.
- 2013 **Developer**, *Startup Group "Privatera"*, Hong Kong.
- Assisted in the development of a secure network disk system called "iSafebin".
 - Designed the core secure storage system for encrypted files and folders, and developed the key management system for managing individual file keys, group keys and user keys.
- 2011 – 2012 **Developer**, *Hong Kong Baptist University*, Hong Kong.
- Developed the location-based system "VERDICT" featuring the privacy-preserving authentication capability with HTML5, JavaScript, Google Map API v3 and Java.
 - Published the system in 29th IEEE International Conference on DATA ENGINEERING.
- 2009 – 2011 **Student Coach**, *East China Normal University*, China.
- Coached undergraduate students for ACM/ICPC training, mainly focused on commonly used data structures and algorithms.
 - Organized the programming contest in ECNU.
 - Developed new features of the online judge system for programming exercises.

Awards

- 2014 Yakun Scholarship for Mainland Postgraduate Student, HKBU, on academic merit.
- 2013 Postgraduate Research Scholarship, Dept. of CS, HKBU.
- 2013 Best Paper Award, the Research Postgraduate Symposium, Dept. of CS, HKBU.
- 2012 **First Runner-up Prize**, the ACM Collegiate Programming Contest Hong Kong.
- 2011 **World Finalist (42th)**, the **ACM/ICPC World Finals**, among 8305 teams representing 2070 universities worldwide.
- 2011, 2012 Travel Grant Awards, the ACM SIGMOD and IEEE ICDE Conferences.

- 2011 – 2015 4-year PhD Studentship, Elite Student Scheme, HKBU.
- 2011 Best Final Year Project, Dept. of CS, ECNU.
- 2011 Outstanding Graduate Award, ECNU.
- 2010 Meritorious Winner, the American Mathematical Contest in Modeling.
- 2010 **Gold Medals (two)**, the ACM/ICPC National Invitation Contests.
- 2009 – 2010 **Gold Medal (one) and Silver Medals (three)**, the ACM/ICPC Asia Regional Contests.

Selected Publications and Ongoing Works

- 2015 **Q. Chen**, H. Hu, and J. Xu, "*Authenticated Online Data Integration Services*", in Proc. of the 2015 ACM SIGMOD International Conference on Management of Data (**SIGMOD'15**), Melbourne, Australia, May/June 2015.
- 2015 Z. Fan, B. Choi, **Q. Chen**, J. Xu, H. Hu, and S. S. Bhowmick, "*Structure-Preserving Subgraph Query Services*", IEEE Transactions on Knowledge and Data Engineering (**TKDE**), accepted to appear.
- 2014 **Q. Chen**, H. Hu, and J. Xu, "*Authenticating Top-k Queries in Location-based Services with Confidentiality*", Full Paper, in Proc. of the VLDB Endowment (**VLDB'14**), Vol. 7, No. 1, pages: 49-60, September 2014.
- 2013 H. Hu, **Q. Chen**, and J. Xu, "*VERDICT: Privacy-Preserving Authentication of Range Queries in Location-based Services*", Demo Paper, in Proc. of the 29th IEEE International Conference on DATA ENGINEERING (**ICDE'13**), Brisbane, Australia.
- 2012 H. Hu, J. Xu, **Q. Chen**, and Z. Yang, "*Authenticating Location-based Services without Compromising Location Privacy*", Full Paper, in Proc. of the 2012 ACM SIGMOD International Conference on Management of Data (**SIGMOD'12**), Arizona, USA.

VLDB, ICDE and SIGMOD are ranked top-3 conferences in databases area by Microsoft Academic Research.

Patent Application

H. Hu, J. Xu, and **Q. Chen**, "*Method and Apparatus for Authenticating Location-based Services without Compromising Location Privacy*", US Non-Provisional Patent Application No. 13/769,846 .

Skills

Proficient with

languages Java, C++
 technologies Git, Vim, L^AT_EX, Eclipse, Gnuplot, IPE, MySQL, OSX, Windows, Ubuntu

Have Experience with

languages C#, Python, JavaScript, Matlab, PHP, HTML, SQL
 technologies Android, Visual Studio, Hadoop, Oracle, SQLserver