

# Shanshan HAN

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## EDUCATION

JUL. 2017	<b>Harbin Institute of Technology (HIT, member of C9 League)</b> <i>Master of Philosophy, Computer Science</i> Research Topic: Data Mining, Data Management. Advisor: Prof. <a href="#">Hongzhi Wang</a> .	Harbin, China
JUL. 2015	<b>Harbin Institute of Technology (HIT, member of C9 League)</b> <i>Bachelor of Engineering, Software Engineering. Graduate with Honors.</i> GPA: 3.27, Advanced GPA: 3.53, Ranking: 24/123 Courses: Data Structure and Algorithms, Algorithmic Design and Analysis, Principles of Compiling, Linear Algebra, Probability and Statistics, Mathematical Analysis, Discrete Mathematics, etc.	Harbin, China

## PUBLICATIONS

- [1] [Shanshan Han](#), Hongzhi Wang, Jialin Wan, Jianzhong Li. [An Iterative Scheme for Leverage-based Approximate Aggregation](#). *Submitted to TKDE*.
  - Proposed a novel methodology to obtain a high-precision estimation, which involves generating two estimators using different methods to process constrained modulations iteratively.
  - Applied iterative leveraging to data management for the first time.
  - Proposed a sophisticated leverage strategy which considers the nature of data.
- [2] Jialin Wan, Siyao Cheng, [Shanshan Han](#), Jianzhong Li. [Optimal Scheduling of Friendly Jammers for Securing Wireless Communication](#).
  - Studied schedule strategies of jammers to prevent eavesdroppers and maximize the network lifetime.
- [3] [Shanshan Han](#), Hongzhi Wang, Hong Gao, Jianzhong Li, Shenbin Huang. [Fuzzy Keywords Query](#). *Asia-Pacific Web Conference*, 2016.
  - Proposed a novel method to deal with fuzzy keywords query efficiently. Combined the ontology with fuzzy sets to construct fuzzy ontology.
- [4] Book: **Big Data Analysis**. *Participated in preparation*. Author: Hongzhi Wang. *To be published*.
  - Responsible for the first drafts for chapter: Big Data Analysis Algorithms.
- [5] [Shanshan Han](#), Hongzhi Wang. A Leverage-based Scheme for Extreme Value Aggregation. *In progress*.

## INTERNSHIP & WORK EXPERIENCE

2014.7-2015.5	<b>Baidu, Beijing, China</b> - Developed a platform which provides monitor services to app developers. - Mainly worked on app crash analysis, monitor, and product management. - Accomplished my graduate project: <a href="https://crab.baidu.com">https://crab.baidu.com</a> .	Full-Time Intern
2017.7-PRESENT	<b>CMB Network Technology, Hangzhou, China</b> - Participated in developing CMB (China Merchants Bank) Assets Entrusting Platform.	Research and Development Engineer
2013.7 2013.8	<b>Neusoft, Dalian, China</b> - Participating in developing a financial management system. - Realized the financial management function and the financial analysis function.	Summer Intern

## HONORS AND AWARDS

2015-2016	First-Class Postgraduate Scholarship (twice)
JUL. 2015	Excellent Graduate Award in HIT
2011	Second-Class People's Scholarship
2013	Third-Class People's Scholarship
JUN. 2013	Outstanding Individual Award for Scientific and Technological Innovation
APR. 2014	Top-10 of Baidu Hackathon
APR. 2014	Second Prize of Blue Bridge Cup National Information Technology Competition
2013	Successful participant of Intel Cup National Software Innovation Contest

## PROJECTS

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2017.7	<b>Movie Sales Prediction.</b> <a href="#">[Github]</a> <i>Java, Regression and Prediction, Gradient Boost Decision Tree</i> <ul style="list-style-type: none"><li>- Predicted the two-week sales of the upcoming movies using the movies' information (type, developer, actor, director, popularity, etc).</li><li>- Trained the predictor using the movie information and the sales of the last five years.</li><li>- Used GBDT to improve the accuracy of the model.</li></ul>	<b>Developed Independently</b>
2013.4	<b>Spirograph.</b> <a href="#">[Video]</a> <i>HTML5, JavaScript, the Intel Cup Contest project</i> <ul style="list-style-type: none"><li>- Developed a graphic tool to generate beautiful mathematical roulette curves.</li><li>- Inspired by the traditional Chinese folk toy, Spirograph. Responsible for the algorithm design.</li></ul>	<b>Main Developer</b>
2012.10	<b>Simple Instant Messaging Software.</b> <a href="#">[Video]</a> <i>Java, TCP protocol (for file transfer), UDP protocol (for text messages)</i> <ul style="list-style-type: none"><li>- Developed an instant messaging software which can send text messages and transfer files.</li></ul>	<b>Developed Independently</b>
2013.6	<b>K-shortest Paths.</b> <a href="#">[Video]</a> <i>Java, greedy algorithm</i> <ul style="list-style-type: none"><li>- Computed single-source K-shortest loopless paths for a graph with non-negative edge cost.</li></ul>	<b>Developed Independently</b>
OTHERS	<b>More projects are <a href="#">[HERE]</a>.</b>	

## PATENTS

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- [1] | **Shanshan Han**, Hongzhi Wang, Jialin Wan. A Method of Leverage-based AVG Aggregation on Big Data, China Patent, Patent Number: 2017101754584.

## STUDENT ACTIVITY EXPERIENCE

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- 2012 – 2016 **Violin player @ HIT Philharmonic Orchestra**  
- Participated in performances, e.g., HIT Symphonic Music Festival, for more than 20 times.
- 2015 – 2017 **Monitor @ The Massive Data Research Center, HIT**  
- Organized activities, e.g., the 2016 New Year party.

## SKILLS

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**Programming Skills:** C, C++, C#, Java, JavaEE, JavaScript, HTML, CSS  
**Integrated Development Environment:** Eclipse, codeblocks, Visio Studio  
**Database:** SQL, MySQL, Oracle, DB2