

Yuhua Lin

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EDUCATION	<i>Doctorate of Philosophy in Computer Engineering</i> Clemson University, GPA: 3.75/4.00	August 2016 Clemson, SC
	<i>Master of Engineering in Computer Science and Technology,</i> Sun Yat-Sen University, Cumulative Overall GPA: 3.8/4.0; Major 3.9/4.0	June 2012 GuangZhou, China
	<i>Bachelor of Engineering in Software Engineering,</i> Sun Yat-Sen University, Cumulative Overall GPA: 3.81/4.00; Major 3.90/4.00; Ranked 4 out of 68	June 2009 GuangZhou, China
RESEARCH EXPERIENCE	Research Assistant, Clemson University <ul style="list-style-type: none">• Effective and economical content delivery and storage strategies for cloud systems<ul style="list-style-type: none">– Designed and simulated a lightweight cloud gaming system, which uses supernodes to reduce latency and cloud bandwidth consumption– Proposed and implemented an economical and deadline-driven video flow scheduling system to reduce the bandwidth costs of inter-datacenter transfers– Proposed a game-based adaptive bitrate streaming method to minimize the cloud bandwidth consumption and guarantee users' satisfaction– Designed a dynamic carpool system that leverages the wireless social network characteristic and hierarchical cloud server architecture• Effective file storage system<ul style="list-style-type: none">– Proposed an energy-efficient adaptive file replication system, which is adaptive to time-varying file popularities to achieve a good tradeoff between data availability and efficiency• Enhancing performance of distributed systems<ul style="list-style-type: none">– Proposed a reputation based Question and Answer system, which uses a category and theme based reputation system to evaluate users' willingness and capability to answer various kinds of questions. Implemented using Java Applet framework and MySQL– Simulated a social-network-aided efficient live streaming system	June 2011 to present
	Research Assistant, Sun Yat-Sen University <ul style="list-style-type: none">• Analyzed scheduling and optimization problems in emergency relief• Researched on the application of heuristic algorithms, e.g., using genetic algorithm in emergency resources scheduling	January 2009 - May 2011
SKILLS	Java, Python, C/C++, PHP, MySQL	
WORK EXPERIENCE	Shenzhen IMSL Key Lab, Shenzhen, China <ul style="list-style-type: none">• Participated in developing Ad'Com system• worked on data mining and clustering, practice in C and C++ Software Factory of Sun Yat-sen University, Guangzhou, China 2008 - June 2009 <ul style="list-style-type: none">• Researched on mass data storing and information extracting• Lead a team of 4 in developing a health care management system, which is serving hundreds of people in GuangZhou 12nd hospital	June 2010 - August 2010

- CONFERENCE PUBLICATION • **Y. Lin** and H. Shen, VShare: A Wireless Social Network Aided Vehicle Sharing System Using Hierarchical Cloud Architecture, *Proc. of the IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI)*, April 4-8, 2016, Berlin, Germany
- **Y. Lin**, H. Shen and L. Chen, EcoFlow: An Economical and Deadline-Driven Inter-Datcenter Video Flow Scheduling System, short paper, *Proc. of the 22nd ACM International Conference on Multimedia*, Oct. 26th - 30th, 2015, Brisbane, Queensland, Australia
- **Y. Lin** and H. Shen, AutoTune: Game-based Adaptive Bitrate Streaming in P2P-Assisted Cloud-Based VoD Systems, *Proc. of the IEEE International Conference on Peer-to-Peer Computing (P2P)*, September 21-35, 2015, Cambridge, MA
- **Y. Lin** and H. Shen, Leveraging Fog to Extend Cloud Gaming for Thin-Client MMOG with High Quality of Experience, *Proc. of the 44th International Conference on Parallel Processing (ICPP)*, September 1-September 4, 2015, Beijing, China
- **Y. Lin** and H. Shen, An Energy-Efficient Adaptive File Replication System In Data-Intensive Clusters, *Proc. of the 24th International Conference on Computer Communications and Networks (ICCCN)*, August 3-August 6, 2015, Las Vegas, Nevada [Best Paper Runner-up Award]
- **Y. Lin** and H. Shen, SmartQ: A Question and Answer System for Supplying High-Quality and Trustworthy Answers, *Proc. of the International Conference on Parallel and Distributed Systems (ICPADS)*, Dec. 16-19, 2014, Hsinchu, Taiwan
- H. Shen, **Y. Lin** and H. Chandler, Interest-based Per-Community P2P Hierarchical Structure for Short Video Sharing on YouTube, *Proc. of the 34th International Conference on Distributed Computing Systems (ICDCS)*, June 30-July 3, 2014, Madrid, Spain
- JOURNAL PUBLICATION • **Y. Lin** and H. Shen, AutoTune: Game-based Adaptive Bitrate Streaming in Cloud-Based Hybrid VoD Systems, *IEEE Transactions on Services Computing (TSC)*, Accepted on Aug 30, 2016
- **Y. Lin** and H. Shen, CloudFog: Leveraging Fog to Extend Cloud Gaming for Thin-Client MMOG with High Quality of Experience, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, Accepted on May 3, 2016
- H. Shen, **Y. Lin**, K. Sapra and Z. Li, Enhancing Collusion Resilience in Reputation Systems, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, Issue: 99, pp: 1, 2015
- T. Li, **Y. Lin** and H. Shen, A Locality-Aware Similar Information Searching Scheme, *International Journal on Digital Libraries*, 2014, Issue: 99, pp: 1-15, 2014
- H. Shen, **Y. Lin** and J. Li, Social Network-aided Efficient Peer-to-Peer Live Streaming System, *IEEE/ACM Transactions on Networking (TON)*, Vol. 23, no. 3, pp. 987-1000, 2015
- H. Shen, **Y. Lin** and T. Li, Combining Efficiency, Fidelity and Flexibility in Resource Information Services, *IEEE Transactions on Computers (TC)*, Vol. 62, no. 2, pp. 353-367, 2015
- H. Shen, Z. Li, **Y. Lin** and J. Li, SocialTube: P2P-assisted Video Sharing in Online Social Networks, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, Vol. 25, no. 9, pp. 2428-2440, 2014
- H. Shen, **Y. Lin**, Z. Li, Refining Reputation to Truly Select High-QoS Servers in Peer-to-Peer Networks, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, Vol. 24, no. 12, pp. 2439-2450, 2014
- **Y. Lin**, H. Shen and L. Chen, EcoFlow: An Economical and Deadline-Driven Inter-Datcenter Video Flow Scheduling System, *IEEE Transactions on Computers (TON)*, under review
- **Y. Lin** and H. Shen, EAFR: An Energy-Efficient Adaptive File Replication System In Data-Intensive Clusters, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, under review
- **Y. Lin** and H. Shen, VShare: A Wireless Social Network Aided Vehicle Sharing System Using Hierarchical Cloud Architecture, *IEEE Transactions on Service Computing (TSC)*,

under review

POSTER	<ul style="list-style-type: none">• Y. Lin, H. Shen and L. Chen, An Economical and Deadline-Driven Inter-Datacenter Video Flow Scheduling System, <i>Proc. of The 35th International Conference on Distributed Computing Systems (ICDCS) Poster Session</i>, June 29th - July 2nd, 2015, Columbus, Ohio• Y. Lin and H. Shen, Leveraging Fog to Extend Cloud Gaming for Thin-Client MMOG with High Quality of Experience, <i>Proc. of The 35th International Conference on Distributed Computing Systems (ICDCS) Poster Session</i>, June 29th - July 2nd, 2015, Columbus, Ohio												
AWARDS	<table><tr><td>IEEE International Conference on Computer Communications and Networks Best Paper Runner-up Award</td><td>August 2015</td></tr><tr><td>NSF Student Travel Grant, IEEE International Conference on Distributed Computing Systems</td><td>June 2015</td></tr><tr><td>Excellent Graduates of Sun Yat-sen University</td><td>June 2009</td></tr><tr><td>Excellent Dissertation for Bachelor Degree of Sun Yat-sen University</td><td>June 2009</td></tr><tr><td>Level 1 Scholarship (5%), Sun Yat-sen University</td><td>2007-2008</td></tr><tr><td>Level 2 Scholarship (15%), Sun Yat-sen University</td><td>2006-2007, 2005-2006</td></tr></table>	IEEE International Conference on Computer Communications and Networks Best Paper Runner-up Award	August 2015	NSF Student Travel Grant, IEEE International Conference on Distributed Computing Systems	June 2015	Excellent Graduates of Sun Yat-sen University	June 2009	Excellent Dissertation for Bachelor Degree of Sun Yat-sen University	June 2009	Level 1 Scholarship (5%), Sun Yat-sen University	2007-2008	Level 2 Scholarship (15%), Sun Yat-sen University	2006-2007, 2005-2006
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Level 2 Scholarship (15%), Sun Yat-sen University	2006-2007, 2005-2006												
PROFESSIONAL ACTIVITIES	<p>Reviewer for Journals</p> <p>IEEE Transactions on Parallel and Distributed Systems (TPDS) Journal of Parallel and Distributed Computing Scalable Computing Computer Networks</p> <p>External Reviewer (Journals)</p> <p>IEEE/ACM Transactions on Networking (TON) IEEE Transactions on Computers (TC) IEEE Transactions on Cloud Computing (TCC)</p> <p>External Reviewer (Conferences)</p> <p>2012-2016 IEEE International Conference on Computer Communications (INFOCOM) 2015 IEEE International Conference on Computer Communications and Networks (ICCCN) 2015 IEEE International Conference on Parallel Processing (ICPP) 2014 IEEE International Conference on Network Protocols (ICNP) 2012-2014 IEEE International Conference on Distributed Computing Systems (ICDCS) 2012-2014 IEEE International parallel & Distributed Processing Symposium (IPDPS) 2012-2013 IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS) 2013 ACM International World Wide Web Conference (WWW)</p>												