

# LIN JIANG

Tel: (951)-850-6958 • [jianglinjack@gmail.com](mailto:jianglinjack@gmail.com) • [google scholar](#)

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## EDUCATION

<b>University of California, Riverside, US</b> Ph.D. in Computer Science; GPA: 3.91/4.0 Advisor: <a href="#">Prof. Zhijia Zhao</a>	Sep/16 - Sep/21
<b>Beijing University of Posts and Telecommunications – Beijing, China</b> Master of Engineering in Computer Science; GPA: 3.4/4.0	Sep/08 - Mar/11
<b>Northeastern University – Shenyang, China</b> Bachelor of Science in Information and Computation Science; GPA: 3.6/4.0	Aug/04 - Jul/08

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## PUBLICATIONS

- Lin Jiang and Zhijia Zhao. [JSONski: Streaming Semi-structured Data with Bit-Parallel Fast-Forwarding](#). In Proceedings of the 27th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, 2022. **(Best Paper Award)**
- Lin Jiang, Junqiao Qiu, and Zhijia Zhao. [Scalable Structural Index Construction for JSON Analytics](#). In *Proceedings of VLDB Endowment*, 14(4): 2021.
- Junqiao Qiu, Lin Jiang, and Zhijia Zhao. [Challenging Sequential Bitstream Processing via Principled Bitwise Speculation](#). In *Proceedings of the 25th ACM International Conference on Architectural Support for Programming Languages and Operating Systems*, 2020, pages 607-621. **(Best Paper Award)**
- Lin Jiang, Xiaofan Sun, Umar Farooq, and Zhijia Zhao. [Stream Processing of Contemporary Semi-Structured Data on Commodity Parallel Processors - A Compilation-based Approach](#). In *Proceedings of the 24th ACM International Conference on Architectural Support for Programming Languages and Operating Systems*, 2019, pages 79-92.
- Lin Jiang and Zhijia Zhao. [Grammar-aware Parallelization for Scalable XPath Querying](#). In *Proceedings of the 22th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming*, 2017, pages 371-383.

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## PROFESSIONAL EXPERIENCE

<b>Meta Platforms, Bellevue, WA, US</b> Research Scientist <ul style="list-style-type: none"><li>Working on the real-time distributed data analytics platform with high QPS and low latency</li></ul>	Sep/21 – Present
<b>University of California, Riverside, US</b> Graduate Student Researcher <ul style="list-style-type: none"><li>Designed and implemented scalable algorithms for optimizing the performance of semi-structured data processing<ul style="list-style-type: none"><li>Proposed parallelize pushdown automaton for handling XML and JSON query processing</li><li>Used SIMD and bitwise parallelism instructions to accelerate JSON query processing</li></ul></li></ul>	July/17 – July/21
<b>Teaching Assistant</b> <ul style="list-style-type: none"><li>CS 100: Software Construction [Fall 2017, Winter 2018]</li><li>CS 153: Operating System [Fall 2017, Spring 2018]</li></ul>	
<b>Facebook</b> Software Engineer Intern <ul style="list-style-type: none"><li>Worked in stream data processing team focusing on the execution plan optimization</li></ul>	Jun/20 – Sep/20
<b>Amazon</b> Software Development Engineer Intern <ul style="list-style-type: none"><li>Worked on dynamic memory management for query processing in Amazon Redshift</li></ul>	Jun/19 – Sep/19
<b>Department of Software Development, Bank of Beijing, China</b> Technical Manager <ul style="list-style-type: none"><li>Established online financing module for supply chain system</li><li>Optimized the performance of batch processing module in financing system by using multiple threading and database optimization techniques (SQL optimization, index construction, etc.)</li></ul>	Jul/11 - Apr/15 2013-2015
<b>Software Engineer</b> <ul style="list-style-type: none"><li>Participated in the development and maintenance of alipay, supply chain and financing systems</li></ul>	2011-2013

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## TALKS

- “JSONski: streaming semi-structured data with bit-parallel fast-forwardings” at the 27th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, 2022 [Remote]
- “Scalable Structural Index Construction for JSON Analytics” at 47th International Conference on Very Large Data Bases, 2021 [Remote]

*“Stream Processing of Contemporary Semi-Structured Data on Commodity Parallel Processors - A Compilation-based Approach”* at 24th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, 2019

*“Grammar-aware Parallelization for Scalable XPath Querying”* at 18th SoCal PLS, UCR, 2017

*“Grammar-aware Parallelization for Scalable XPath Querying”* at 22th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming, 2017

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#### HONORS & AWARDS

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**Dissertation Year Fellowship:** University of California Riverside, US, 2020

**Deans Distinguished Fellowship:** University of California Riverside, US, 2016 – 2017

**Travel Grant Awards:** PPOPP'17, ASPLOS'19

**Graduate Fellowship:** Beijing University of Posts and Telecommunications, China, 2008-2011

**Undergraduate Scholarship:** Northeastern University, China, 2005-2008

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#### SKILL SET

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Proficient with C/C++, JAVA, C#, Python programming languages

Profound background in algorithm and coding; familiar with programming design patterns

Familiar with semi-structured data, such as XML, JSON, etc.

Familiar with SQL SERVER and ORACLE databases and SQL statements coding

Familiar with web development (html, javascript, jsp, ASP.NET, etc.)