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- EDUCATION**
- Ph.D. Candidate, Database Systems** 2014-2018 (Expected)
University of Wisconsin-Madison, Madison, WI, USA
Advisor: **Prof. Jignesh Patel**
Thesis topic: Towards high perf., cloud-based distributed analytical query processing.
- M.Eng., Computer Systems Organization** 2010-2012
Harbin Engineering University (HEU), Harbin, China
- B.Eng., Computer Science and Technology** 2006-2010
Harbin Institute of Technology (HIT), Harbin, China
- TECHNICAL SKILLS**
- Prog. Lang.: C/C++, BASH scripting, and X86 AT&T Assembly.
Tools: YARN, HDFS, Mesos, LLVM, gTest, gLog, gRPC, CMake, Protobuf, and GIT.
- EXPERIENCE**
- Research Assistant, UW-Madison** 2014-present
- Extended **Quickstep** towards a distributed database on YARN and HDFS, including gRPC based data exchanger.
 - Worked on partition aware query execution engine.
 - Worked on a fast datalog engine.
- ACM SIGMOD Programming Contest** Feb-Apr 2018
- Winner among 30+ teams from 10+ countries.
 - Architected an in-memory analytical query engine from scratch as a team.
 - Proposed join-sum-aggregate operator fusion, and index-based linear-joins.
- Software Engineering Intern, Google** Oct-Dec 2016
- Implemented multi-tenant interactive reporting service.
- Software Engineering Intern, Twitter** May-Aug 2014, Jul-Sep 2016
- Prototyped the first Mesos scheduler in C++ using the low level APIs for **Twitter Heron**, demonstrated on a Mesos cluster of 150 nodes.
 - Prototyped the streaming query plan generator for Heron.
- Intern, Apache Quickstep Committer, Pivotal** Jun 2015-Jul 2016
- Exploited distributed OLAP techniques in **Apache Quickstep**.
- Research Internship, INRIA-Tsinghua, Beijing** Nov 2010-May 2011
- Proposed a **macro-block** based JIT code generation technique to speedup the **SimSoC** simulator.
 - Accelerated 35% in average, and achieved 95 MIPS with peaks at 125 MIPS.
- PUBLICATIONS**
- Jignesh M. Patel, Harshad Deshmukh, Jianqiao Zhu, Navneet Potti, **Zuyu Zhang**, Marc Spehlmann, Hakan Memisoglu, Saket Saurabh, “Quickstep: A Data Platform Based on the Scaling-Up Approach”, *Proc. VLDB Endow.* 11, 6 (February 2018), 663-676.

Jianqiao Zhu, **Zuyu Zhang**, Dylan Bacon, “ACM SIGMOD 2018 Programming Contest Entry from the Quickstep Team”, ACM SIGMOD Poster Session, 2018. **First place winner.**

Zuyu Zhang, Vania Joloboff, Xinlei Zhou, Claude Helmstetter, and Guoyin Zhang, “Fast Dynamic Translation Using LLVM On Multi-Core Hosts”, The Fifth Workshop on *Architectural and Microarchitectural Support for Binary Translation (AMAS-BT)*, in conjunction with ISCA, 2012.

EXTRA-CURRICULARS	President , ACM Student Chapter, UW-Madison	2013-2015
	Member , Hooper Sailing Club, UW-Madison	2013-2017

INTERESTS Sailing, clarinet, and travel (6 countries).