Chenggang Wu

465 Soda Hall, Berkeley, CA 94720, USA

cgwu@berkeley.edu • cgwu.io

EDUCATION

University of California, Berkeley

- Doctor of Philosophy (Ph.D.) in Computer Science   Aug 2015 – Present
  - Adviser: Joseph M. Hellerstein
  - Research areas: Data-centric Systems, Distributed Systems, Machine Learning

Brown University

- Bachelor of Science (B.S.) in Computer Science   May 2015
  - Magna cum laude with Honors in Computer Science.
  - Cumulative GPA: 4.0 / 4.0

RESEARCH EXPERIENCE

RISE Lab, UC Berkeley   Sep 2016 – Present

- Fluent: a declarative programming framework for building distributed systems.
- Anna: a super-fast, flexibly consistent, autoscaling and cost-effective Key-Value Store.

CISL Lab, Microsoft   May 2017 – Oct 2018

- CardLearner: a system that learns cardinality models from previous query executions and uses them to aid the query optimizer in predicting the cardinalities of future queries.

Data Management Research Group, Brown University   Jan 2014 – May 2015

- S-Store: a transactional stream processing system that simultaneously accommodates OLTP workload and streaming applications.
- Seer: a predictive prefetching and caching middleware for exploratory visualization of big data.

PUBLICATIONS

[1] *Anna: A KVS For Any Scale*.
Chenggang Wu, Jose Faleiro, Yihan Lin, Joseph M. Hellerstein.
TKDE 2019 (to appear), "Best of ICDE 2018" Special Issue.

[2] *Eliminating Boundaries in Cloud Storage with Anna*.
Chenggang Wu, Vikram Sreekanti, Joseph M. Hellerstein.
VLDB 2019 (to appear).

[3] *Serverless Computing: One Step Forward, Two Steps Back*.
Joseph M. Hellerstein, Jose Faleiro, Joseph E. Gonzalez, Johann Schleier-Smith,
Vikram Sreekanti, Alexey Tumanov, **Chenggang Wu**.
CIDR 2019.

[4] *Towards a Learning Optimizer for Shared Clouds*.
Chenggang Wu, Alekh Jindal, Saeed Amizadeh, Hiren Patel,
Wangchao Le, Shi Qiao, Sriram Rao.
VLDB 2019.

[5] *Anna: A KVS For Any Scale*.
Chenggang Wu, Jose Faleiro, Yihan Lin, Joseph M. Hellerstein.
ICDE 2018, Best of Conference Selection.

INVITED TALKS

Eliminating Boundaries in Cloud Storage with Anna

- Alibaba Group, October 2018
- RISE Lab Retreat, May 2018
- Amazon Web Services, May 2018

Towards a Learning Optimizer for Shared Clouds

- Microsoft, August 2017

Anna: A KVS For Any Scale
- Alibaba Group, October 2018
- RISE Lab Retreat, May 2018
- Amazon Web Services, May 2018
- ICDE 2018, April 2018

PROFESSIONAL SERVICES	Reviewer for TKDE 2019.
	U.C. Berkeley EECS Graduate Admissions Committee Member.
	Organizer of Database Seminar for Berkeley Database Group.

TEACHING

Graduate Student Instructor, UC Berkeley
- CS186/286A: Introduction to Database Systems, Spring 2018
  - with Prof. Mehul Shah
- CS186/286A: Introduction to Database Systems, Spring 2016
  - with Prof. Joseph E. Gonzalez and Prof. Joseph M. Hellerstein

Head Teaching Assistant, Brown University
- CS1951A: Introduction to Data Science, Spring 2015
  - with Prof. Tim Kraska
- CS1270: Database Management Systems, Fall 2014
  - with Prof. Stan Zdonik

ACADEMIC AWARDS

Computing Research Association Outstanding Undergraduate Researchers Award - Nominee, Brown University
- Awarded to the top three students in the computer science department based on research contributions.

TECHNICAL BACKGROUND

Advanced Coursework: Artificial Intelligence, Databases, Data Science, Distributed Systems, Machine Learning, Parallel Computing, Programming Languages & Compilers, Algorithms, Systems Security.

Programming: C/C++, Python, Java, JavaScript, Scala.