

Yongjoo Park

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RESEARCH	Large-scale data management; Machine learning; Cloud computing Leading CreateLab at CS@Illinois	
ACADEMIC POSITIONS	Assistant Professor Department of Computer Science University of Illinois at Urbana–Champaign Adjunct Assistant Professor (leap years) Department of Computer Science University of Illinois at Urbana–Champaign Research Fellow Computer Science and Engineering University of Michigan, Ann Arbor • <i>Principal Investigator:</i> Barzan Mozafari	Jan 2021–Present Nov 2019–Dec 2020 Sep 2017–Jul 2019
EDUCATION	Ph.D., Computer Science and Engineering University of Michigan, Ann Arbor • <i>Advisors:</i> Michael Cafarella and Barzan Mozafari M.S., Computer Science University of Michigan, Ann Arbor B.S., Electrical Engineering Seoul National University (SNU)	Aug 2017 Jun 2013 Feb 2009
PROFESSIONAL EXPERIENCE	Chief Scientist Keebo, Inc. (https://keebo.ai/) Co-founder and CTO Keebo, Inc. (https://keebo.ai/) Graduate Student Research Assistant University of Michigan, Ann Arbor Software Engineer Intern Amazon.com, Seattle Graduate Student Instructor University of Michigan, Ann Arbor	Sep 2022–Present Aug 2019–Aug 2022 Sep 2012–Apr 2017 May 2014–Aug 2014 Jan 2012–Apr 2012

Software Engineer

Webcash, Seoul

Dec 2008–May 2011

Research Assistant

Seoul National University, Seoul

June 2007–Jan 2008

AWARDS	Microsoft Azure Cloud Credit, \$15,000	July 2022
	2021 Engineering Council Outstanding Advising Award	Feb 2021
	Google Cloud Credits, \$5,000	Feb 2021
	Microsoft Azure Cloud Credits, \$30,000	June 2020
	Google Cloud Credits, \$10,000	Feb 2020
	2018 ACM SIGMOD Jim Gray Dissertation Award Runner-up	Jun 2018
	ACM SIGMOD Student Travel Award, \$900	May 2017
	Rackham Travel Grant, \$800	Jan 2017
	Kwanjeong Graduate Study Fellowship (for Ph.D.), \$100,000	2013–2017
	Jeongsong Graduate Study Fellowship (for Masters), \$55,000	2011–2013
	Korean National Science Scholarship, \$20,000	2004

TEACHING

Advanced Data Systems (CS 511)

Instructor, University of Illinois at Urbana-Champaign, Fall 2022

Database Management Systems (CS 411)

Instructor, University of Illinois at Urbana-Champaign, Fall 2021

Advanced Data Systems (CS 511)

Instructor, University of Illinois at Urbana-Champaign, Spring 2021

Advanced Database Management Systems (EECS 584)

Guest Lecturer, University of Michigan, Fall 2018

Database Management Systems (EECS 484)

Guest Lecturer, University of Michigan, Winter 2018

Web Databases and Information Systems (EECS 485)

Graduate Student Instructor, University of Michigan, Winter 2012

PUBLICATION

Referred Conference Papers

1. Supawit Chockchowwat, Wenjie Liu, **Yongjoo Park**

Automatically Finding Optimal Index Structure

AIDB Workshop at VLDB 2022 (research): 4th International Workshop on Applied AI for Database Systems and Applications, Sydney, Australia, 2022.

2. Sophia Yang, **Yongjoo Park**, and Abdussalam Alawini
The Effects of Teaching Modality on Collaborative Learning: A Controlled Study
FIE 2022 (research): The Frontiers in Education, Uppsala, Sweden, 2022.
3. Supawit Chockchowwat, Chaitanya Sood, **Yongjoo Park**
Airphant: Cloud-oriented Document Indexing
ICDE 2022 (research): 38th International Conference on Data Engineering, Kuala, Malaysia, 2022.
4. Johes Bater, **Yongjoo Park**, Xi He, Xiao Wang, Jennie Rogers
SAQE: Practical Privacy-Preserving Approximate Query Processing for Data Federations
PVLDB 2020 (research): 46th International Conference on Very Large Data Bases, Tokyo, Japan (Online due to COVID-19), 2020.
5. **Yongjoo Park**, Shucheng Zhang, Barzan Mozafari
QuickSel: Quick Selectivity Learning with Mixture Models
SIGMOD'20 (research): ACM SIGMOD/PODS International Conference on Management of Data, Portland, OR, USA, 2020.
6. **Yongjoo Park**, Jingyi Qing, Xiaoyang Shen, Barzan Mozafari
BlinkML: Efficient Maximum Likelihood Estimation with Probabilistic Guarantees
SIGMOD'19 (research): ACM SIGMOD/PODS International Conference on Management of Data, Amsterdam, The Netherlands, 2019.
7. **Yongjoo Park**, Barzan Mozafari, Joseph Sorenson, Junhao Wang
VerdictDB: Universalizing Approximate Query Processing
SIGMOD'18 (research): ACM SIGMOD/PODS International Conference on Management of Data, Houston, TX, USA, 2018.
8. Wen He, **Yongjoo Park**, Idris Hanafi, Jacob Yatvitskiy, Barzan Mozafari
Demonstration of VerdictDB, the Platform-Independent AQP System
SIGMOD'18 (demo): ACM SIGMOD/PODS International Conference on Management of Data, Houston, TX, USA, 2018.
9. **Yongjoo Park**, Amhad Shahab Tajik, Michael Cafarella, Barzan Mozafari
Database Learning: Toward a Database System that Becomes Smarter Over Time
SIGMOD'17 (research): ACM SIGMOD/PODS International Conference on Management of Data, Chicago, IL, USA, 2017.
SIGMOD Travel Award
10. **Yongjoo Park**
Active Database Learning
CIDR'17 (abstract): The biennial Conference on Innovative Data Systems Research, Chaminade, CA, USA, 2017.

11. **Yongjoo Park**, Michael Cafarella, Barzan Mozafari
Visualization-Aware Sampling for Very Large Databases
ICDE'16 (research): IEEE 32nd International Conference on Data Engineering, Helsinki, Finland, 2016.
12. **Yongjoo Park**, Michael Cafarella, Barzan Mozafari
Neighbor-Sensitive Hashing
PVLDB'15 (research) for VLDB'16: 42nd International Conference on Very Large Data Bases, New Delhi, India, 2016.
13. Michael Anderson, Dolan Antenucci, Victor Bittorf, Matthew Burgess, Michael Cafarella, Arun Kumar, Feng Niu, **Yongjoo Park**, Christopher Ré, Ce Zhang
Brainwash: A Data System for Feature Engineering
CIDR'13 (vision): The biennial Conference on Innovative Data Systems Research, Asilomar, CA, USA, 2013.

Thesis

14. Yongjoo Park
Fast Data Analytics by Learning
 Ph.D. Dissertation
Awarded 2018 ACM SIGMOD Jim Gray Dissertation Award runner-up

Non-Referred Technical Reports (full versions to published papers)

15. Yongjoo Park, Jingyi Qing, Xiaoyang Shen, Barzan Mozafari
BlinkML: Efficient Maximum Likelihood Estimation with Probabilistic Guarantees
16. Yongjoo Park, Barzan Mozafari, Joseph Sorenson, Junhao Wang
VerdictDB: Universalizing Approximate Query Processing
17. Yongjoo Park, Amhad Shahab Tajik, Michael Cafarella, Barzan Mozafari
Database Learning: Toward a Database System that Becomes Smarter Over Time
18. Yongjoo Park, Michael Cafarella, Barzan Mozafari
Neighbor-Sensitive Hashing
19. Yongjoo Park, Michael Cafarella, Barzan Mozafari
Visualization-Aware Sampling for Very Large Databases

ADVISING	Supawit Chockchowwat (Ph., University of Illinois at Urbana-Champaign)	2020–Present
	Zhaoheng (Billy) Li (PhD, University of Illinois at Urbana-Champaign)	2021–Present
	Nikhil Sheoran (MS, University of Illinois at Urbana-Champaign)	2021–Present
	Chaitanya Sood (BS, University of Illinois at Urbana-Champaign)	2020
	Shucheng Zhong (BS and MS, University of Michigan, Ann Arbor)	2018–2020

Wen He (BS, University of Michigan, Ann Arbor)	2017–2018
Jingyi Qing (BS, University of Michigan, Ann Arbor)	2017–2018
Xiaoyang Shen (BS, University of Michigan, Ann Arbor)	2017–2018
Joseph Sorenson (MS, University of Michigan, Ann Arbor)	2017–2018
Junhao Wang (BS, University of Michigan, Ann Arbor)	2017–2018

TALKS

CS Colloquium, University of Illinois Urbana-Champaign, via Zoom, Feb 2021

Dream Lab, University of Massachusetts Amherst, via Zoom, Nov 2020

AWS User Group, Chicago, Nov 2019

SIGMOD, Amsterdam, June 2019

WAX workshop at FCRC, Phoenix, June 2019

Criteo NABD conference, Ann Arbor, May 2019

University of Texas, Austin, April 2019

Penn State University, State College, April 2019

Purdue University, West Lafayette, April 2019

Northeastern University, Boston, March 2019

University of Waterloo, March 2019

Georgia Tech, Atlanta, March 2019

University of Illinois, Urbana-Champaign, March 2019

Microsoft Research, Redmond, February 2019

Northwestern University, Redmond, February 2019

Microsoft, Redmond, February 2019

IBM Research, Almaden, February 2019

SIGMOD, Houston, June 2018

AVL (www.avl.com), Ann Arbor, April 2018

Oracle BI Group, Redwood City, December 2017

ACAIA workshop, San Jose, November 2017

Oracle Database Group, Redwood City, November 2017

Cloudera Impala Team, Palo Alto, November 2017

Big Data Innovation Summit, Boston, September 2017

New Tech Meetup, Ann Arbor, July 2017

SIGMOD, Chicago, May 2017

University of Michigan Software Group, Ann Arbor, May 2017
Brown Database Group, Providence, March 2017
Stanford InfoLab, Palo Alto, February 2017
CIDR, Chaminade, California, January 2017
MBDOC, Chicago, September 2016
NEDB, Boston, January 2016
ICDE, Helsinki, Finland, May 2016
AVL (www.avl.com), Ann Arbor, April 2016
VLDB, New Delhi, India, September 2016
VSM workshop at ICCV, Santiago, Chile, December 2015

SERVICE

Graduate admissions committee, Computer Science, UIUC, 2023
Program Committee, Fifth Conference on Machine Learning and Systems (MLSys 2023)
Program Committee, ACM Symposium on Cloud Computing (SoCC) 2022
PhD Dissertation Committee, Amirhossein Aleyasen, UIUC, 2022
Publicity Chair, 39th IEEE International Conference on Data Engineering (ICDE 2023)
Program Committee, ACM Student Research Competition Grand Finals competition 2022
Program Committee, Fifth Conference on Machine Learning and Systems (MLSys 2022)
Faculty search committee, Computer Science, UIUC, 2022
Program Committee, ACM Symposium on Cloud Computing (SoCC) 2021
Graduate admissions committee, Computer Science, UIUC, 2021
Co-chair, SIGMOD 2021–2022 Student Research Competition
Research Track Program Committee, VLDB 2021
Research Track Program Committee, VLDB 2020
Program Committee, SIGMOD 2020
Program Committee, SIGMOD 2020 Student Research Competition
Reviewer, TKDE 2019
Reviewer, VLDB Journal 2019
Program Committee, ACM Symposium on Cloud Computing (SoCC) 2019
Reviewer, IEEE Transactions on Knowledge and Data Engineering (TKDE) 2018
Program Committee, aiDM workshop at SIGMOD 2018 (<http://www.aidm-conf.org/>)
Reviewer, SIGMOD 2018

Publicity Chair, ACAIA workshop 2017 (<http://dbgroup.eecs.umich.edu/acaia/>)

Reviewer, VLDB Journal 2017

Organizer of

- University of Michigan Database Group meetings 2016, 2014
- MIDAS (Michigan Data Science) seminars 2014