Yongjoo Park

Thomas M. Siebel Center, Rm 2114
201 North Goodwin Avenue
Urbana, IL 61801-2302

Website: **https://yongjoopark.com**
Email: yongjoo@illinois.edu
Voice: +1 (734) 707-9206

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

Software Engineer   Dec 2008–May 2011
Webcash, Seoul

Research Assistant   June 2007–Jan 2008
Seoul National University, Seoul

AWARDS   **NCSA** 2023-2024 Fellow, $25,000   February 2023

Teaching Excellence, Fall 2022 (CS 511)   January 2023

Microsoft Azure Cloud Credit, $16,000   July 2022

2021 Engineering Council Outstanding Advising Award   February 2021

Google Cloud Credits, $5,000   February 2021

Microsoft Azure Cloud Credits, $30,000   June 2020

Google Cloud Credits, $10,000   February 2020

2018 ACM SIGMOD Jim Gray Dissertation Award Runner-up   June 2018

ACM SIGMOD Student Travel Award, $900   May 2017

Rackham Travel Grant, $800   January 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
Received **Teachers Ranked as Excellent**

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 & Workshop Papers**

1. Nikhil Sheoran, Supawit Chockchowwat, Arav Chheda, Suwen Wang, Riya Verma, **Yongjoo Park**
A Step Toward Deep Online Aggregation
SIGMOD 2023 (research): ACM SIGMOD/PODS International Conference on Management of Data, Seattle, WA, USA, 2023.

2. Zhaoheng Li, Xinyu Pi, **Yongjoo Park**
S/C: Speeding up Data Materialization with Bounded Memory
ICDE 2023 (research): 39th International Conference on Data Engineering, Anaheim, USA, 2023.

3. 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.

4. 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.

5. Supawit Chockchowwat, Chaitanya Sood, **Yongjoo Park**
Airphant: Cloud-oriented Document Indexing
ICDE 2022 (research): 38th International Conference on Data Engineering, Kuala, Malaysia, 2022.

6. 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.

7. **Yongjoo Park**, Shucheng Zhang, Barzan Mozafari
QuickSel: Quick Selectivity Learning with Mixture Models
SIGMOD 2020 (research): ACM SIGMOD/PODS International Conference on Management of Data, Portland, OR, USA, 2020.

8. **Yongjoo Park**, Jingyi Qing, Xiaoyang Shen, Barzan Mozafari
BlinkML: Efficient Maximum Likelihood Estimation with Probabilistic Guarantees
SIGMOD 2019 (research): ACM SIGMOD/PODS International Conference on Management of Data, Amsterdam, The Netherlands, 2019.

9. **Yongjoo Park**, Barzan Mozafari, Joseph Sorenson, Junhao Wang
VerdictDB: Universalizing Approximate Query Processing
SIGMOD 2018 (research): ACM SIGMOD/PODS International Conference on Management of Data, Houston, TX, USA, 2018.

10. Wen He, **Yongjoo Park**, Idris Hanafi, Jacob Yatvitskiy, Barzan Mozafari
    Demonstration of VerdictDB, the Platform-Independent AQP System
    SIGMOD 2018 (demo): ACM SIGMOD/PODS International Conference on Management of Data, Houston, TX, USA, 2018.

11. **Yongjoo Park**, Amhad Shahab Tajik, Michael Cafarella, Barzan Mozafari
    Database Learning: Toward a Database System that Becomes Smarter Over Time
    SIGMOD 2017 (research): ACM SIGMOD/PODS International Conference on Management of Data, Chicago, IL, USA, 2017.
    SIGMOD Travel Award

12. **Yongjoo Park**
    Active Database Learning
    CIDR 2017 (abstract): The biennial Conference on Innovative Data Systems Research, Chaminade, CA, USA, 2017.

13. **Yongjoo Park**, Michael Cafarella, Barzan Mozafari
    Visualization-Aware Sampling for Very Large Databases
    ICDE 2016 (research): IEEE 32nd International Conference on Data Engineering, Helsinki, Finland, 2016.

14. **Yongjoo Park**, Michael Cafarella, Barzan Mozafari
    Neighbor-Sensitive Hashing
    PVLDB 2015 (research) for VLDB'16: 42nd International Conference on Very Large Data Bases, New Delhi, India, 2016.

15. 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 2013 (vision): The biennial Conference on Innovative Data Systems Research, Asilomar, CA, USA, 2013.

Thesis

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

Patents

17. Alekh Jindal, Barzan Mozafari, **Yongjoo Park**, Brian Westphal, Shi Qiao, Matthew Larsen, Advait Abhay Dixit
    Platform agnostic query acceleration
    United States Patent 11567936

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

18. Yongjoo Park, Jingyi Qing, Xiaoyang Shen, Barzan Mozafari
BlinkML: Efficient Maximum Likelihood Estimation with Probabilistic Guarantees

19. Yongjoo Park, Barzan Mozafari, Joseph Sorenson, Junhao Wang
VerdictDB: Universalizing Approximate Query Processing

20. Yongjoo Park, Amhad Shahab Tajik, Michael Cafarella, Barzan Mozafari
Database Learning: Toward a Database System that Becomes Smarter Over Time

21. Yongjoo Park, Michael Cafarella, Barzan Mozafari
Neighbor-Sensitive Hashing

22. Yongjoo Park, Michael Cafarella, Barzan Mozafari
Visualization-Aware Sampling for Very Large Databases

ADVISING	Shadman Eusuf (PhD, University of Illinois at Urbana-Champaign)	2023–Present
	Zhaoheng (Billy) Li (PhD, University of Illinois at Urbana-Champaign)	2021–Present
	Supawit Chockchowwat (PhD, University of Illinois at Urbana-Champaign)	2020–Present
	Pranav Gor (MCS, University of Illinois at Urbana-Champaign)	2023–Present
	Wenjie Hu (PhD, UW–Madison; Primary Advisor: Xiangyao Yu)	2022–Present
	Hanjun Goo (PhD, SNU; Primary Advisor: Kyuseok Shim)	2021–Present
	Nikhil Sheoran (MS, UIUC → Databricks)	2021–2022
	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	Database Class Seminar, Cornell University, March 2023
	CS Colloquium, University of Illinois Urbana-Champaign, via Zoom, February 2021
	Dream Lab, University of Massachusetts Amherst, via Zoom, November 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

Midwest Big Data Opportunities and Challenges (MBDOC) Workshop, Chicago, September 2016

North East Database Day (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	Program Committee, ACM SIGMOD Student Research Competition 2023
	Reviewer, Information Systems 2023
	Program Committee, ACM Student Research Competition Grand Finals competition 2023
	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
	Co-chair, SIGMOD 2022 Student Research Competition
	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 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