

Curriculum Vitae

Oliver Kennedy

Department of Computer Science and Engineering
University at Buffalo, SUNY
338 Davis Hall
Buffalo, NY 14260

Phone: +1 (716) 645-1597
Web: <https://odin.cse.buffalo.edu/>

63 Bassett Road
Amherst, NY 14221

Email: okennedy@buffalo.edu

Education

PhD, Cornell University, Ithaca, NY 2011
Department of Computer Science
Thesis: “*Watch out for... What?: Monitoring and Uncertainty in Scientific Computing*”
Advisor: Christoph Koch

MS, Cornell University, Ithaca, NY 2008
Department of Computer Science

BS (with Honors), New York University, New York, NY 2005
Department of Computer Science

BS, Stevens Institute of Technology, Hoboken, NJ 2005
Department of Computer Engineering

Employment History

- Assistant Professor, Dept. of Comp. Sci. & Eng., SUNY Buffalo Sept. 2012 – present
- Postdoctoral Fellow, D.A.T.A. Lab, EPFL, Switzerland June 2011 – Aug. 2012
- Intern, Microsoft Research, Redmond, WA May 2010 – Aug. 2010
- Intern, Yahoo! Labs, Sunnyvale CA May 2009 – Aug. 2009
- Teaching/Research Assistant, Cornell University Sept. 2005 – May 2011
- Programmer, Humanities Computing Group, New York University Sept. 2003 – Aug. 2005
- Programmer, Parallel and Dist. Sys. Group, New York University Jan. 2001 – May 2003

Honors

The pVLDB 2012 paper titled “DBToaster: Higher-order Delta Processing for Dynamic, Frequently Fresh Views” was accepted to the “Best of VLDB 2012” issue of the VLDB Journal.

Oliver received a UB CSE Outstanding Funding Award for attracting over \$3m of funding to the University at Buffalo in 2016.

The SIGMOD 2017 paper titled “Beta Probabilistic Databases: A Scalable Approach to Belief Updating and Parameter Learning” was invited to submit a Best-Of-SIGMOD extended article to the ACM Transactions on Database Systems Journal.

Oliver received the UB School of Engineering and Applied Sciences Early Career Outstanding Teacher of the Year Award in 2017

Oliver received the NSF’s CAREER award in 2018

Oliver received a UB Exceptional Scholar: Young Investigator Award in 2018

Oliver was recognized as a VLDB Distinguished Reviewer for his service on the PC of VLDB 2018

Students Advised

PhD Students Advised (3 graduated, 6 current)

Niccolò Meneghetti (Graduated in 2016; Jointly advised with Jan Chomicki), Ying Yang (Graduated in 2017), Gökhan Kul (Graduated in 2018; Jointly advised with Shambhu Upadhyaya), Aaron Huber (Current Student), Carl Nuessle (Current Student; Jointly advised with Luke Ziarek), Darshana Balakrishnan (Current Student; Jointly advised with Luke Ziarek), Poonam Kumari (Current Student), Ting Xie (Current Student), William Spoth (Current Student)

MS Students Advised (11 graduated, 0 current)

Ankur Upadhyay (Graduated in 2014; Jointly advised with Lukasz Ziarek), Nikhil Kataria (Graduated in 2014), Palaniappan Meiyappan (Graduated in 2014), Sumit Agarwal (Graduated in 2014; Jointly advised with Lukasz Ziarek), Saket Adusumilli (Graduated in 2015), Vinayak Karuppasamy (Graduated in 2015), Arindam Nandi (Graduated in 2016), Anand Sankar Bhagavandas (Graduated in 2017), Shivang Aggarwal (Graduated in 2017), Sneha Krishnamurthy (Graduated in 2017), Gourab Mitra (Graduated in 2018; Jointly advised with Luke Ziarek)

BS Students Advised (6 graduated, 0 current)

Daniel Bellinger (Graduated in 2014; Jointly advised with Lukasz Ziarek), Thomas Mitchell (Graduated in 2015; Jointly advised with Varun Chandola and Shambhu Upadhyaya), Grant Wrazen (Graduated in 2017; Jointly advised with Luke Ziarek and Geoff Challen), Hank Lin (Graduated in 2017; Jointly advised with Luke Ziarek), Lisa Lu (Graduated in 2017; Jointly advised with Luke Ziarek), Olivia Alphonse (Graduated in 2017)

Professional Activities

Program Comittee Chairships

- Committee: The pVLDB Reproducibility Committee (pVLDB-Reproducibility) 2018

Program Comittee Member

- Workshop: The VLDB PhD Workshop (VLDB-PhD) 2013
- Demo: VLDB Demo Track (VLDB-Demo) 2016 – 2017
- Journal: Proceedings of the VLDB Endowment (pVLDB) 2017 – 2018
- Conference: The ACM SIGMOD/PODS Conference (SIGMOD) 2015 – 2017, 2019
- Conference: The International Conference on Data Engineering (ICDE) 2019
- Workshop: Provenance Week (PWEEK) 2016
- Workshop: Workshop on Human-In-the-Loop Data Analytics (HILDA) 2016 – 2018
- Conference: Symposium on Cloud Computing (SoCC) 2017

Reviewer

- Journal: The VLDB Journal (VLDBJ) 2013, 2017 – 2018
- Journal: IEEE Transactions on Knowledge and Data Engineering (TKDE) 2013 – 2014
- Journal: ACM Transactions on Database Systems (TODS) 2015, 2018
- Journal: Computer Science Education (CSE) 2015
- Journal: Transactions on Information Technology (TOIT) 2016
- Journal: Knowledge and Information Systems (KAIS) 2017
- Conference: The International Conference on Database Theory (ICDT) 2017

Service

- WebDB Session Chair 2013
- NSF Panel Member 2014 – 2016, 2018
- SIGMOD Reproducibility Committee 2015 – 2017

Professional Memberships

- ACM 2012 – present
- ACM-SIGMOD 2010 – present
- ACM-Computer Science Teachers Assoc. 2012 – present
 - WNY Chapter Secretary Sept. 2013 – Sept. 2015
- IEEE 2009 – present

Volunteer Work

- LIBERTY Partnerships 2013 – present
 - Summer Mentor 2013 – 2014
 - ‘I Can’ Program Volunteer 2015 – 2017

- Coder Dojo Mentor 2013 – 2014
- Science is Elementary Class Leader 2014 – 2016

Departmental Service

- Dept. of Comp. Sci. and Eng., University at Buffalo, SUNY
 - Graduate Admissions Committee 2012 – present
 - Graduate Advisory Board 2012 – present
 - Distinguished Speaker Committee 2017 – present
 - Faculty Search Committee 2012 – 2014
 - Facilities Committee 2016
 - Colloquium Committee 2012 – 2014
 - * Chair 2014
 - Grievances Committee 2015 – 2016
 - Undergraduate Curriculum Development Subcommittee 2015 – 2016

Invited Talks

1. *Cornell* — Don't Wrangle, Guess Instead (with Mimir) Jan. 2018
2. *Penn State U.* — Don't Wrangle, Guess Instead (with Mimir) Jan. 2018
3. *Harvard* — Just-In-Time Data Structures Dec. 2017
4. *University of Washington* — Don't Wrangle, Guess Instead (with Mimir) Dec. 2017
5. *Columbia* — Don't Wrangle, Guess Instead (with Mimir) Oct. 2017
6. *University of Michigan* — Don't Wrangle, Guess Instead (with Mimir) Oct. 2017
7. *Illinois Inst. Tech.* — Don't Wrangle, Guess Instead (with Mimir) Oct. 2017
8. *University of Chicago* — Don't Wrangle, Guess Instead (with Mimir) Oct. 2017
9. *Ohio State University* — Don't Wrangle, Guess Instead (with Mimir) Oct. 2017
10. *Cornell* — Just-In-Time Data Structures Sep. 2017
11. *ICDE* — Small Data (panel moderator) Apr. 2017
12. *Buffalo Database Seminar Meetup* — Post-Truth Databases (lightning talk) Apr. 2017
13. *Airbus* — Embracing Uncertainty with Mimir Oct. 2016
14. *RIT* — Pocket Data Oct. 2016
15. *LogicBlox* — Just-In-Time Data Structures Jun. 2016
16. *NYU* — Embracing Uncertainty with Mimir May. 2016
17. *HPE/Vertica* — Embracing Uncertainty with Mimir Mar. 2016
18. *Carnegie Mellon* — Embracing Uncertainty with Mimir Feb. 2016
19. *Buffalo District Board of Education* — LEGO NXT Professional Development Jan. 2015
20. *Ohio State University* — PocketData: What's in your pocket? Oct. 2015
21. *Oracle* — Just-In-Time Data Structures Jan. 2015
22. *Pivotal* — Just-In-Time Data Structures Jan. 2015
23. *Snowflake Computing Inc.* — Just-In-Time Data Structures Jan. 2015
24. *Western New York CSTA Fall Conference* — Queries with Twitter Tutorial Oct. 2014
25. *Buffalo Database Seminar Meetup* — Everything I Need to Know I Learned From PL Sept. 2014

26. *Google CS4HS, ACM-CSTA, and Buffalo State* — Mobilize Prime Workshop (with Lukasz Ziarek, Sarbani Banerjee) March. 2014
27. *Western New York CSTA Professional Development Workshops* — SQL Tutorial Jan. 2014
28. *Buffalo Database Seminar Meetup* — Emerging Trends in Database Research Jan. 2014
29. *Western New York CSTA 2013 CS4HS Workshop* — Python Workshop (with Lukasz Ziarek, Sarbani Banerjee) Jun. 2013
30. *Cornell University Database Colloquium* — Laasie: The Log as a Service Infrastructure Feb. 2013
31. *Western New York CSTA 2012 Fall Conference* — Python Workshop (with Lukasz Ziarek, Sarbani Banerjee) Oct. 2012

Courses Taught

Department of Computer Science and Engineering, SUNY Buffalo

- CSE 4/562 : Database Systems (planned) Spring 2019
- CSE 611 : MS Project Development — 46 students Fall 2018
- CSE 4/562 : Database Systems — 93 students Spring 2018
- CSE 662 : Languages and Runtimes for Big Data — 13 students Fall 2017
- CSE 562 : Graduate Database Systems — 54 students Spring 2017
- CSE 199 : Undergraduate CS Seminar Recitation — 21 students Fall 2016
- CSE 705 : Database Research Seminar — 7 students Fall 2016
- CSE 662 : Languages and Runtimes for Big Data — 10 students Fall 2016
- CSE 462 : Undergraduate Database Systems — 72 students Spring 2016
- CSE 662 : Languages and Runtimes for Big Data — 29 students Fall 2015
- CSE 562 : Graduate Database Systems — 79 students Spring 2015
- CSE 704 : Databases, Programming Languages and Datastructures — 21 students Fall 2014
- CSE 562 : Graduate Database Systems — 148 students Spring 2014
- CSE 704 : Streaming, Incremental and Online Data Processing — 18 students Fall 2013
- CSE 562 : Graduate Database Systems — 101 students Spring 2013
- CSE 704 : Web-Scale Data Management Systems Seminar — 15 students Fall 2012

School of Computer and Communication Sciences, EPFL, Switzerland

- CS-422 : Advanced Databases (as Teaching Assistant) Spring 2011

Department of Computer Science, Cornell University

- CS 4410 : Operating Systems (as Practicum Instructor) Fall 2008
- CS 414 : Operating Systems (as Practicum Instructor) Spring 2006
- CS 414 : Operating Systems (as Practicum Instructor) Fall 2006

Grant Support

Pending Applications (3)

Title : III: MEDIUM: Collaborative Research: U4U - Taming Uncertainty with
Uncertainty-Annotated Databases
Agency : NSF: CISE: IIS: MEDIUM
Role : PI
Start : 06/2019
End : 05/2023
Amount : \$654,712 (Total Across Collaboration: \$1,104,712)
Effort : 100%
Peer Org. : Illinois Inst. Tech. (\$450,000)

Title : SAM: complex environments and behavior through adolescence
Agency : NIEHS
Role : CoPI
Start : 07/01/2019
End : 06/30/2042
Amount : \$1,774,074
Effort : 35%
Co-PIs : Kordas, Katarzyna, Elena I. Queirolo, Gabriel Barg, Colder, Craig, Kennedy,
Oliver, Olson, James, Ahmed, Zia

Title : III: SMALL: Constrained, Informed Laziness for Mobile Data Management [This
Proposal]
Agency : NSF: CISE: IIS: SMALL
Role : Co-PI
Start : 01/01/2020
End : 12/31/2022
Amount : \$477,250 (Total Across Collaboration: \$927,250)
Effort : 50%
Peer Org. : Illinois Inst. Tech. (\$450,000)

Awarded Grants (4) — \$4,722,248 Total; \$1,928,893 By Effort

Title : CAREER: Declarative Uncertainty
Agency : NSF: CISE: IIS: III
Role : PI
Start : 01/2018
End : 01/2023
Amount : \$542,276
Effort : 100%

Title : CIF21 DIBBs: El: Vizier, Streamlined Data Curation
Agency : NSF: ACI: DIBBS
Role : PI
Start : 01/2017
End : 12/2019
Amount : \$2,749,699
Effort : 33%
Co-PIs : Boris Glavic, Juliana Freire
Supplements : NSF-REU (amount included in total above)

Title : III: Small: Just in Time Datastructures
Agency : NSF: CISE: IIS: III
Role : PI
Start : 07/2016
End : 04/2019
Amount : \$502,274
Effort : 50%
Co-PI : Lukasz Ziarek
Supplements : NSF-REU (amount included in total above)

Title : TWC: Medium: Collaborative: Data is Social: Exploiting Data Relationships to Detect Insider Attacks
Agency : NSF: CISE: SaTC
Role : PI
Start : 09/2014
End : 08/2018
Amount : \$975,999 (Total Across Collaboration: \$1,215,973)
Effort : 25%
Co-PIs : Hung Ngo, Shambhu Upadhyaya, Varun Chandola
Peer Org. : University of Michigan Ann Arbor (\$239,974)
Supplements : NSF-REU (amount included in total above)

Gifts (1) — \$96,684 Total; \$96,684 By Effort

Title : Adaptive Schema and Elastic Query for No-SQL Data
Agency : Oracle University Relations
Role : PI
Start : 12/2017
End : 12/2018
Amount : \$96,684
Effort : 100%

Completed (6) — \$671,655 Total; \$402,076 By Effort

Title : CI-P: Supporting Pocket Scale Data Management Research
Agency : NSF: CISE: IIS: CRI
Role : PI
Start : 08/2016
End : 08/2017
Amount : \$100,000
Effort : 33%
Co-PIs : Lukasz Ziarek, Geoffrey Challen

Title : Curating Uncertainty and Reliable Exploitation (CURE)
Agency : The US Naval Postgraduate School
Role : Co-I
Start : 08/2016
End : 12/2017
Amount : \$265,357
Effort : 50%
Co-PI : Moises Sudit

Title : Intuitive Data Interpretation
Agency : Oracle University Relations
Role : PI
Start : 05/2016
End : 05/2017
Amount : \$89,187
Effort : 100%

Title : Expressing Uncertainty Using the maybe System
Agency : Google Research Awards
Role : Co-PI
Start : 08/2015
End : 07/2016
Amount : \$38,656
Effort : 33%
Co-PIs : Geoffrey Challen, Lukasz Ziarek

Title : Intuitive Data Interpretation
Agency : Oracle University Relations
Role : PI
Start : 03/2015
End : 03/2016
Amount : \$90,455
Effort : 100%

Title : Intuitive Data Interpretation
Agency : Oracle University Relations
Role : PI
Start : 03/2014
End : 03/2015
Amount : \$88,000
Effort : 50%
Co-PI : Jan Chomicki

Publications and Artifacts

(Students I (co)advise and I are **bolded**, my former advisor is underlined)

Journal Publications (6)

T. Xie, V. Chandola, **O. Kennedy**; QUERY LOG COMPRESSION FOR WORKLOAD ANALYTICS — *Proceedings of the VLDB Endowment (pVLDB) 2019*, 12 pages, acceptance rate unknown; average rate approximately 17.8%

N. Meneghetti, **O. Kennedy**, W. Gatterbauer; LEARNING FROM QUERY-ANSWERS: A SCALABLE APPROACH TO BELIEF UPDATING AND PARAMETER LEARNING — *ACM Transactions on Database Systems (TODS) 2018*, 40 pages, acceptance rate not available / Invited article extending a 'Best-of-SIGMOD' paper from SIGMOD 2017

G. Kul, **D. T. Luong**, **T. Xie**, V. Chandola, **O. Kennedy**, S. Upadhyaya; SIMILARITY METRICS FOR SQL QUERY CLUSTERING — *IEEE Transactions on Knowledge and Data Engineering (TKDE) 2018 (Volume 30, Number)*, 15 pages, acceptance rate not available

Y. Yang, **N. Meneghetti**, R. Fehling, Z. H. Liu, D. Gawlick, **O. Kennedy**; LENSES: AN ON-DEMAND APPROACH TO ETL — *Proceedings of the VLDB Endowment (pVLDB) 2015 (Volume 8, Number 12)*, 12 pages, acceptance rate 21.3%

C. Koch, Y. Ahmad, **O. Kennedy**, M. Nolic, A. Nötzli, D. Lupei, A. Shaikhana (*Authors listed in descending order of seniority*); DBTOASTER: HIGHER-ORDER DELTA PROCESSING FOR DYNAMIC, FREQUENTLY FRESH VIEWS — *The VLDB Journal (VLDBJ) 2014 (Volume 23, Number 2; Special*

issue on the best papers of VLDB 2012), 25 pages, acceptance rate not available / Extended version of a conference paper, published in a special 'Best-of-VLDB' issue of VLDBJ

Y. Ahmad, **O. Kennedy**, C. Koch, M. Nolic; DBTOASTER: HIGHER-ORDER DELTA PROCESSING FOR DYNAMIC, FREQUENTLY FRESH VIEWS — *Proceedings of the VLDB Endowment (pVLDB) 2012*, 12 pages, acceptance rate 20.3% / Invited to submit an extended version to a 'Best-of-VLDB' issue of VLDBJ

Conference Publications (12)

N. Meneghetti, **O. Kennedy**, W. Gatterbauer; BETA PROBABILISTIC DATABASES: A SCALABLE APPROACH TO BELIEF UPDATING AND PARAMETER LEARNING — *The ACM SIGMOD/PODS Conference (SIGMOD) 2017*; Chicago, IL, USA; 12 pages, acceptance rate 19.6% / Invited to submit an extended version as a 'Best-of-SIGMOD' paper to ACM-TODS

Y. Yang, **O. Kennedy**; CONVERGENT INFERENCE WITH LEAKY JOINS — *International Conference on Extending Database Technology (EDBT) 2017*; Venice, Italy; 12 pages, acceptance rate 21.8%

W. Spoth, B. S. Arab, E. S. Chan, D. Gawlick, A. Ghoneimy, B. Glavic, B. Hammerschmidt, **O. Kennedy**, S. Lee, Z. H. Liu, X. Niu, **Y. Yang** (*Authors listed in alphabetical order*); ADAPTIVE SCHEMA DATABASES — *The Conference on Innovative Data Systems Research (CIDR) 2017*; Santa Cruz, CA, USA; 6 pages, acceptance rate unknown (less than 30% in previous years)

O. Kennedy, L. Ziarek; JUST IN TIME DATASTRUCTURES — *The Conference on Innovative Data Systems Research (CIDR) 2015*; Monterey, CA, USA; 10 pages, acceptance rate unknown (less than 30% in previous years)

K. Jeon, S. Chandrashekhara, F. Shen, S. Mehra, **O. Kennedy**, S. Y. Ko (*Authors listed students first, then faculty*); PIGOUT: MAKING MULTIPLE HADOOP CLUSTERS WORK TOGETHER — *The IEEE International Conference on Big Data (IEEE BigData) 2014*; Washington, DC, USA; 9 pages, acceptance rate 18.6%

J. Yang, E. Vee, S. Vassilvitskii, J. Tomlin, J. Shanmugasundaram, T. Anastasakos, **O. Kennedy**; INVENTORY ALLOCATION FOR ONLINE GRAPHICAL DISPLAY ADVERTISING USING MULTI-OBJECTIVE OPTIMIZATION — *The International Conference on Operations Research and Enterprise Systems (ICORES) 2012*; Vilamoura, Portugal; 12 pages, acceptance rate not available

O. Kennedy, S. Nath; JIGSAW: EFFICIENT OPTIMIZATION OVER UNCERTAIN ENTERPRISE DATA — *The ACM SIGMOD/PODS Conference (SIGMOD) 2011*; Athens, Greece; 12 pages, acceptance rate 25.0%

O. Kennedy, Y. Ahmad, C. Koch; DBTOASTER: AGILE VIEWS FOR A DYNAMIC DATA MANAGEMENT SYSTEM — *The Conference on Innovative Data Systems Research (CIDR) 2011*; Monterey, CA, USA; 12 pages, acceptance rate unknown (less than 30% in previous years)

O. Kennedy, C. Koch; PIP: A DATABASE SYSTEM FOR GREAT AND SMALL EXPECTATIONS — *The International Conference on Data Engineering (ICDE) 2010*; Long Beach, CA, USA.; 12 pages, acceptance rate 21.0%

O. Kennedy, C. Koch, A. Demers; DYNAMIC APPROACHES TO IN-NETWORK AGGREGATION — *The International Conference on Data Engineering (ICDE)* 2009; Shanghai, China.; 4 pages, acceptance rate 17.0%

G. Shawver, **O. Kennedy**; THE FACE OF MEANING — *The Joint International Conference of the Association for Computers and the Humanities and the Association for Literary and Linguistic Computing (ACH/ALLH)* 2005; Victoria, BC, Canada; 6 pages, acceptance rate not available

E. Lage-Otero, **O. Kennedy**; SECOND LANGUAGE COMPREHENSION IN AN ONLINE MULTIMEDIA ENVIRONMENT: INTEGRATING THEORY AND PRACTICE. — *The World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (E-Learn)* 2004; Washington, DC, USA; 2 pages, acceptance rate not available

Workshop Publications (12)

W. Spoth, T. Xie, O. Kennedy, Y. Yang, B. Hammerschmidt, Z. H. Liu, D. Gawlick; SCHEMADRILL: INTERACTIVE SEMI-STRUCTURED SCHEMA DESIGN — *Workshop on Human-In-the-Loop Data Analytics (HILDA)* 2018; Houston, TX, USA; pages, acceptance rate unknown; average rate approximately 50.0%

P. Kumari, O. Kennedy; THE GOOD AND BAD DATA — *North East Database Day (NEDB)* 2018; Boston, MA, USA; 2 pages, acceptance rate 19.64%

P. Kumari, S. Achmiz, O. Kennedy; COMMUNICATING DATA QUALITY IN ON-DEMAND CURATION — *International Workshop on Quality in DataBases (QDB)* 2016; New Dehli, India; 4 pages, acceptance rate not available

J. Freire, B. Glavic, **O. Kennedy, H. Mueller** (*Authors listed in alphabetical order*); THE EXCEPTION THAT IMPROVES THE RULE — *Workshop on Human-In-the-Loop Data Analytics (HILDA)* 2016; San Fransisco, CA, USA; 6 pages, acceptance rate 50.0%

X. Niu, B. Arab, D. Gawlick, Z. H. Liu, V. Krishnaswamy, **O. Kennedy, B. Glavic**; PROVENANCE-AWARE VERSIONED DATAWORKSPACES — *USENIX Workshop on Theory and Practice of Provenance (TaPP)* 2016; McLean, VA, USA; 6 pages, acceptance rate not available

G. Kul, D. T. Luong, T. Xie, P. Coonan, V. Chandola, O. Kennedy, S. Upadhyaya; ETTU: ANALYZING QUERY INTENTS IN CORPORATE DATABASES — *Workshop on Empirical Research Methods in Information Security (ERMIS)* 2016; Montreal, Canada; 4 pages, acceptance rate not available

O. Kennedy, J. A. Ajay, G. Challen, L. Ziarek; POCKET DATA: THE NEED FOR TPC-MOBILE — *The TPC Technology Conference on Performance Evaluation & Benchmarking (TPC-TC)* 2015; Big Island, HI, USA; 16 pages, acceptance rate not available

G. Challen, J. A. Ajay, N. DiRienzo, **O. Kennedy, A. Maiti, A. Nandugudi, S. Shantharam, J. Shi, G. P. Srinivasa, L. Ziarek** (*Authors listed in alphabetical order*); MAYBE WE SHOULD ENABLE MORE UNCERTAIN MOBILE APP PROGRAMMING — *The ACM Workshop on Mobile Computing Systems and Applications (HotMobile)* 2015; Santa Fe, NM, USA; 6 pages, acceptance rate 28.75%

O. Kennedy, Y. Yang, J. Chomicki, R. Fehling, Z. H. Liu, D. Gawlick (*Authors listed UB first, then Oracle*); DETECTING THE TEMPORAL CONTEXT OF QUERIES — *Enabling Real-Time Business Intelligence (BIRTE)* 2014; Hangzhou, China; 17 pages, acceptance rate unknown; average rate approximately 45.0%

S. Agarwal, D. Bellinger, O. Kennedy, A. Upadhyay, L. Ziarek (*Authors listed in alphabetical order*); MONADIC LOGS FOR COLLABORATIVE WEB APPLICATIONS — *The International Workshop on the Web and Databases (WebDB)* 2013; New York, NY, USA; 6 pages, acceptance rate 25.0%

A. Shieh, D. Williams, K. Walsh, **O. Kennedy**, P. Reynolds, E. G. Sirer, F. Schneider; NEXUS: A NEW OPERATING SYSTEM FOR BUILDING TRUSTWORTHY APPLICATIONS — *NSDI Poster Session (NSDI-Poster)* 2007; Cambridge, MA, USA; poster, acceptance rate not available

P. Reynolds, **O. Kennedy**, E. G. Sirer, F. Schneider; XMON-BGP: SECURING BGP USING USING EXTERNAL SECURITY MONITORS — *NSDI Poster Session (NSDI-Poster)* 2007; Cambridge, MA, USA; poster, acceptance rate not available

Technical Reports (8)

S. Feng, **A. Huber**, B. Glavic, **O. Kennedy**; UNCERTAINTY ANNOTATED DATABASES - A LIGHTWEIGHT APPROACH FOR DEALING WITH UNCERTAINTY — *Illinois Inst. Tech. Technical Report (IIT-TR)*, 20 pages

N. Meneghetti, O. Kennedy, W. Gatterbauer; BETA PROBABILISTIC DATABASES: A SCALABLE APPROACH TO BELIEF UPDATING AND PARAMETER LEARNING — *SUNY Buffalo Computer Science & Engineering Report (UB CSE)*, 12 pages

G. Kul, D. T. Luong, T. Xie, P. Coonan, V. Chandola, **O. Kennedy**, S. Upadhyaya; SUMMARIZING LARGE QUERY LOGS IN ETTU — *The ArXiv (ArXiv)*, 12 pages

A. Nandi, Y. Yang, O. Kennedy, B. Glavic, R. Fehling, Z. H. Liu, D. Gawlick; MIMIR: BRINGING CTABLES INTO PRACTICE — *The ArXiv (ArXiv)*, 12 pages

O. Kennedy, L. Ziarek; *Bar_{QL}*: COLLABORATING THROUGH CHANGE — *SUNY Buffalo Computer Science & Engineering Report (UB CSE) #2013-03*, 10 pages

O. Kennedy, L. Ziarek; *Bar_{QL}*: COLLABORATING THROUGH CHANGE — *The ArXiv (ArXiv)*, 9 pages

J. Yang, E. Vee, S. Vassilvitskii, J. Tomlin, J. Shanmugasundaram, **O. Kennedy**; INVENTORY ALLOCATION FOR ONLINE GRAPHICAL DISPLAY ADVERTISING — *The ArXiv (ArXiv)*, 25 pages

O. Kennedy, C. Koch, A. Demers; DYNAMIC APPROACHES TO IN-NETWORK AGGREGATION — *The ArXiv (ArXiv)*, 11 pages

Patents (2)

S. Nath, S. Lee, S. Smyl, C. Lobo, **O. Kennedy**; EFFICIENT OPTIMIZATION OVER UNCERTAIN DATA — USA Patent #8,650,180

O. Kennedy, T. Anastasakos, J. Mao, E. Vee, J. Shanmugasundaram, S. Vassilvitskii, J. Yang, J. Tomlin; SYSTEM FOR DISPLAY ADVERTISING OPTIMIZATION USING CLICK OR CONVERSION PERFORMANCE — USA Patent #8,650,180

Artifacts (4)

JUST-IN-TIME DATA STRUCTURES (software) First released July 2014
An index structure that dynamically adapts to variable workloads.

<http://github.com/UB0din/jitd>

As of July 27, 2017, Just-in-Time Data Structures had 5 GitHub watchers, 5 GitHub stars, and 16 GitHub forks

MIMIR (software) First released January 2015
A probabilistic overlay for database systems

<http://mimirdb.info>

As of July 27, 2017, Mimir had 11 GitHub watchers, 8 GitHub stars, and 8 GitHub forks

DBTOASTER (software) First released May 2012
A tool that dynamically compiles database engines optimized for any given query workload.

<http://www.dbtoaster.org>

As of December 10, 2014, DBToaster had 4191 unique website visitors and 1032 unique downloads

PIGOUT (software) First released October 2014
A multi-cluster runtime for Pig Latin

<http://pigout.cse.buffalo.edu>