Recent Activities   Oliver Kennedy

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

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.

Students Advised

PhD Students Advised (2 graduated, 7 current)

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

MS Students Advised (7 graduated, 3 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), Darshana Balakrishnan (Current Student; Jointly advised with Luke Ziarek), Gourab Mitra (Current Student; Jointly advised with Luke Ziarek), Shivang Aggarwal (Current Student)

BS Students Advised (4 graduated, 2 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 (Current Student; Jointly advised with Luke Ziarek), Olivia Alphonce (Current Student)

Professional Activities

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 (since 2017)

– *Penn State U.* — Don't Wrangle, Guess Instead (with Mimir)	Jan. 2018
– *Harvard* — Just-In-Time Data Structures	Dec. 2017
– *University of Washington* — Don't Wrangle, Guess Instead (with Mimir)	Dec. 2018
– *Columbia* — Don't Wrangle, Guess Instead (with Mimir)	Oct. 2017
– *University of Michigan* — Don't Wrangle, Guess Instead (with Mimir)	Oct. 2017
– *Illinois Inst. Tech.* — Don't Wrangle, Guess Instead (with Mimir)	Oct. 2017
– *University of Chicago* — Don't Wrangle, Guess Instead (with Mimir)	Oct. 2017
– *Ohio State University* — Don't Wrangle, Guess Instead (with Mimir)	Oct. 2017
– *Cornell* — Just-In-Time Data Structures	Sep. 2017
– *ICDE* — Small Data (panel moderator)	Apr. 2017
– *Buffalo Database Seminar Meetup* — Post-Truth Databases (lightning talk)	Apr. 2017

Courses Taught (since 2014)

Department of Computer Science and Engineering, SUNY Buffalo

- CSE 562 : Graduate Database Systems (planned) — Spring 2018
- CSE 662 : Languages and Runtimes for Big Data (planned) — Fall 2017
- CSE 562 : Graduate Database Systems — 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

Grant Support

- CIF21 DIBBs: EI: Vizier, Streamlined Data Curation ($2,725,699 from NSF; with Boris Glavic and Juliana Freire)
- Intuitive Data Interpretation ($89,187 from Oracle University Relations)
- CI-P: Supporting Pocket Scale Data Management Research ($100,000 from NSF; with Lukasz Ziarek and Geoffrey Challen)
- Curating Uncertainty and Reliable Exploitation (CURE) ($265,357 from The US Naval Postgraduate School; with Moises Sudit)
- III: Small: Just in Time Datastructures ($494,274 from NSF; with Lukasz Ziarek)
- TWC: Medium: Collaborative: Data is Social: Exploiting Data Relationships to Detect Insider Attacks ($959,999 from NSF; with Hung Ngo, Shambhu Upadhyaya, and Varun Chandola)

Publications and Artifacts (since 2017)

Conference Publications (3)

BETA PROBABILISTIC DATABASES: A SCALABLE APPROACH TO BELIEF UPDATING AND PARAMETER LEARNING (N. Meneghetti, **O. Kennedy**, W. Gatterbauer)— *The ACM SIGMOD/PODS Conference (SIGMOD)* 2017, 12 pages, acceptance rate 19.6%

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

ADAPTIVE SCHEMA DATABASES (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*)— *The Conference on Innovative Data Systems Research (CIDR)* 2017, 6 pages, acceptance rate unknown (less than 30% in previous years)