# Dennis E. Shasha

**Julius Silver Professor of Computer Science**

**Courant Institute of Mathematical Sciences, New York University** [**shasha@courant.nyu.edu**](mailto:shasha@courant.nyu.edu)

**Education**

Yale University New Haven, CT, USA Engineering and Applied Science B.S. 1977

Syracuse University Syracuse, NY, USA Computer Science M.S.1980

Harvard University Cambridge, MA, USA Applied Mathematics Ph.D. 1984

# Appointments

2018-Present Julius Silver Professor of Computer Science and Data Science, New York University

1995-Present Professor, Courant Institute of Mathematical Sciences, New York

University

2006-2007 Invited Professor, INRIA, Roquencourt, France

1998-1999 Invited Professor, INRIA, Roquencourt, France

1992-1993 Invited Professor, INRIA, Roquencourt, France

1993-Present Co-Editor-in-Chief (with Gottfried Vossen and Felix Naumann) of Information Systems. Publisher: Elsevier North Holland

# Relevant Publications (machine learning, causality inference, graph analysis)

1. “*Network Walking charts transcriptional dynamics of nitrogen signaling by integrating validated and predicted genome-wide interactions"* by Matthew Brooks, Jacopo Cirrone, Angelo Pasquino, Jose Alvarez, Joseph Swift, Shipra Mittal, Che-Lun Juang, Kranthi Varala, Rodrigo Gutierrez, Gabriel Krouk, Dennis Shasha, and Gloria Coruzzi [Paper NCOMMS-18-23259B]   
   **NATURE COMMUNICATIONS** (2019) 10:1569 doi: 10.1038/s41467-019-09522-1 April 5, 2019.
2. *“Temporal transcriptional logic of dynamic regulatory networks underlying nitrogen signaling and use in plants”* by Kranthi Varala, Amy Marshall-Colón, Jacopo Cirrone, Matthew D. Brooks, Angelo V. Pasquino, Sophie Léran, Shipra Mittal, Tara M. Rock, Molly B. Edwards, Grace J. Kim, Sandrine Ruffel, W. Richard McCombie, Dennis Shasha, and Gloria M. Coruzzi **Proceedings of the National Academy of Sciences (PNAS)** June 19, 2018 115 (25) 6494-6499 <https://doi.org/10.1073/pnas.1721487115>
3. *"TACITuS: transcriptomic data collector, integrator, and selector on big data platform" Salvatore Alaimo, Antonio Di Maria, Dennis Shasha, Alfredo Ferro, Alfredo Pulvirenti BMC Bioinformatics 20, 366 (2019) doi:10.1186/s12859-019-2912-4*
4. *“Fast Methods for Finding Significant Motifs on Labelled multi-relational networks”* by Giovanni Michale, Alfredo Pulvirenti, Rosalba Giugno, Dennis Shasha   
   **Journal of Complex Networks, cnz,** <http:////dor.org/10.1093/comnet/cnz008>, March 13, 2019.

# Other Publications (general machine learning, time series, graph matching)

1. *"SafePredict: A Meta-Algorithm for Machine Learning That Uses Refusals to Guarantee Correctness"*, by Mustafa Anil Kocak, David Ramirez, Elza Erkip, Dennis Shasha   
   **IEEE Transactions on Pattern Analysis and Machine Intelligence** 2019 doi: 10.1109/TPAMI.2019.2932415
2. *Crowdsourcing Thousands of Specialized Labels: a Bayesian active training approach* Maximilien Servajean, Alexis Joly, Dennis Shasha, Julien Champ, Esther Pacitti

**IEEE Transactions on Multimedia**, Volume: 19, Issue: 6, June 2017, pp. 1376-1391

1. *“ParCorr: Efficient Parallel Methods to Identify Similar Time Series Pairs across Sliding Windows”* Djamel Edine Yagoubi, Reza Akbarinia, Boyan Kolev, Oleksandra Levchenko, Florent Masseglia, Patrick Valduriez, Dennis Shasha

**Data Mining and Knowledge Discovery** September 2018, Volume 32, Issue 5, pp 1481-1507 <https://doi.org/10.1007/s10618-018-0580-z>

# Synergistic Activities:

1. Co-Editor-in-Chief, *Information Systems Journal*
2. 2015-2020 INRIA International Chair
3. 2014- ACM Fellow