# H V Jagadish

Bernard A Galler Collegiate Professor
Computer Science and Engineering
University of Michigan
2260 Hayward St., Ann Arbor, MI 48109-2121, USA
+1 734-763-4079
jag@umich.edu

Ph.D. (Electrical Engineering) – Stanford University.

## Experience

Bernard A Galler Collegiate Professor of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, Jan. 2009 to now.

Distinguished Scientist, Michigan Institute for Data Science, University of Michigan, Ann Arbor, Mar. 2015 to now.

Affiliate Professor, and Member of Executive Committee, Center for Computational Medicine and Bioinformatics, University of Michigan, Ann Arbor, since founding in Sep. 2003 to now.

Director, Software Systems Research Laboratory, University of Michigan, Ann Arbor, Sep. 2007 - Aug. 2014.

Senior Scientific Director, National Center for Integrative Biomedical Informatics, Aug. 2005 - Jul. 2012.

Professor of Computer Science and Engineering, University of Michigan, Ann Arbor, Sep. 1999 to now.

KITHCT (Jan. - Aug. 2013) and Shaw (Jul. 2004 - Jul. 2005) Distinguished Visiting Professor of Computer Science, National University of Singapore.

Professor of Computer Science, University of Illinois, Urbana-Champaign, Jan. 1999 - Aug. 1999.

Division Manager, Database Research, AT&T Labs, Shannon Research Center, Florham Park, NJ, Feb. 1996 - Jan. 1999.

Member of Technical Staff at AT&T Bell Labs, Murray Hill, NJ, Dec. 1985 - Feb. 1996.

## Honors

### Awards and Appointments

Fellow, AAAS. Elected 2018.

Member, National Academies Panel on Improving Federal Statistics for Policy and Social Science Research Using Multiple Data Sources and State-of-the-Art Estimation Methods, 2015 to now.

Member, Research Grants Council Engineering Panel, Hong Kong, 2011 to now.

Member, Board of Directors, Computing Research Association, 2009 to now.

Fellow, ACM. Elected in 2003.

ACM SIGMOD Contributions Award, 2013.

University of Michigan, Herbert Kopf Award for Service Excellence, 2011.

Trustee, VLDB Foundation, 2004-2009.

University of Michigan, David E. Liddle Award for Research Excellence, 2008.

Eminent Engineer, recognition by Tau Beta Pi, the undergraduate engineering honors society, 2015.

Dean's award for excellence in undergraduate student advising, University of Illinois, 1999.

### Presentations

Invited Presenter on "Ethics of Big Data," US National Academies Committee on Science, Technology and the Law, Irvine, CA, Mar. 2015.

Invited Speaker, US National Academies Government-University-Industry Roundtable (GUIRR) on Big Data, Washington DC, Oct. 2014.

Plenary Speaker, Symposium to launch the US National Office of Financial Research, Washington DC, Dec. 2011. (Only Computer Scientist invited to speak at this event devoted to managing systemic risk to the financial system).

Keynote Speaker, ACM SIGMOD Conference on Management of Data (SIGMOD), Beijing, China, Jun. 2007.

Keynote Speaker, Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), Hong Kong, China SAR, Apr. 2001.

Keynote Speaker at several other conferences and workshops, including International Workshop on Web and Databases (WebDB) 2014, Workshop on Big Data for Users (Data4U) 2014, Asia-Pacific Web Conference (APWeb) 2013, Brazilian Database Symposium (SBBD) 2013, Northeast Database Workshop 2008, International Conference on Scientific and Statistical Database Management (SSDBM) 2007, Data Mining in Biology (DMB) 2007, XML Symposium (XSYM) 2006, International Conference on Management of Data (COMAD) 2005, ICDE Bioinformatics Workshop 2003, and IEEE International Workshop on Multimedia Information Systems 2000.

Invited talks at many leading institutions, including UC Berkeley, CMU, Stanford, Harvard, UT Austin, U. Toronto, UCSD, NASA, Google, and IBM.

Expert panelist at several conferences and workshops, including SIGMOD, VLDB, and ICDE.

**Journals**

Editor of the Synthesis Lecture Series on Data Management, Morgan and Claypool, 2016 - now.

Assoc. Editor, *Distributed and Parallel Database Systems* (DPDS), 1999 to now.

Founding Editor-in-Chief, *Proceedings of the Very Large Database Endowment* (PVLDB), 2008-2014. [This is a novel conference-journal hybrid that has had a significant impact on research dissemination models in many areas of Computer Science.]

Editor-in-Chief, *ACM SIGMOD Digital Review*, 1999-2009.

Assoc. Editor, *IEEE Transactions on Data and Knowledge Engineering* (TKDE), 2002-2006.

Assoc. Editor, *Theory and Practice of Object Systems* (TAPOS), 1994-1999.

Assoc. Editor, *ACM Transactions on Database Systems* (TODS), 1992-1995.

**Conferences**

Program Chair, Very Large Database Conference (VLDB), 2014.

Program Chair, International Conference on Intelligent Systems for Molecular Biology (ISMB), 2005.

Program Chair, ACM SIGMOD International Conference on Management of Data (SIGMOD), 1996.

Program Vice Chair, IEEE International Conference Data Engineering (ICDE), 1995, 2000, 2018.

Program Chair, International Conference on Parallel and Distributed Information Systems (PDIS), 1991.

Member of Program Committee for many conferences, including
SIGMOD(1990, 94, 95, 96, 97, 2001, 04, 06, 07, 08, 09, 12, 17, 18, 19), VLDB(1991, 92, 96, 2000, 03, 04, 06, 08, 18), EDBT(1994, 98, 2008, 09, 11), KDD(1998, 99, 2003), ICDE (1994, 95, 98, 99, 2002, 03, 04, 09, 10), PDIS(1990, 96), CIDR(2011, 13), ICDM(2002, 04), ICDCS(2006), GIS(1994, 96), CIKM(2002, 07), WebDB(2005, 06), DILS(2006), and Adv. Digital Libraries(1996).

Member of Organizing Committee, CRA Conference at Snowbird, 2010, 14, 16.

**University Committees**

Member, Provost's Task Force on learning analytics, 2012-2015.

Chair, Blue Ribbon Panel on research data strategy, 2010-2011.

Member, Departmental Executive Committee, almost continuously since 2002.

Chair, EECS Department Reorganization Committee, 2000-2001.

## Synopsis of Technical Activities

- Co-authored 244 refereed papers in journals and major conferences. List of recent publications attached. H-index of 88.

- Co-invented 37 United States patents. List attached. Many of these inventions were also recognized in Europe and other jurisdictions.

- Co-initiated several interdisciplinary educational programs at the University of Michigan:

  - Masters degree in Information Technology Management (2016-now)
  - Masters degree in Data Science (2015-now)
  - Undergraduate degree in Data Science (2012-2015).
  - Graduate certificate in Data Science (2012-2015).
  - Undergraduate degree in Informatics (2006-2009).
  - PhD degree in Bioinformatics (1999-2001).

- Co-authored one book (on Database Design), and 9 book chapters. Also edited a section of one book (on Systemic Risk in Finance).

- Editor of the Synthesis Lecture Series on Data Management, Morgan and Claypool, 2016 - now.

- Developed a Massive Open Online Course (MOOC) on Data Ethics. First offered May 2016.

# List of Patents Issued

1. S. Al-Khalifa, H. V. Jagadish, N. Koudas, J. Patel, D. Srivastava, and Y. Wu, *Method of pattern searching*, US Patent 7451144 issued 11/11/2008.

2. H. V. Jagadish, N. Koudas, S. Muthukrishnan, and D. Srivastava, *Method of performing approximate substring indexing*, US Patent 7444326 issued 10/28/2008 (continuation of US Patent 7050122).

3. H. V. Jagadish, N. Koudas, S. Muthukrishnan, and D. Srivastava, *Method of performing approximate substring indexing*, US Patent 7050122 issued 03/07/2006.

4. G. Banga, F. Douglis, H. V. Jagadish, M. Rabinovich, and K-P. Vo, *Method for transferring and displaying data pages on a data network*, US Patent 6910073, issued 06/21/2005 (continuation of US Patents 5931904 and 06240447).

5. G. Hjalmtysson and H. V. Jagadish, *Method and Apparatus for Providing Telephony over a Computer Network*, US Patent 06493325 issued 12/10/2002.

6. A. Biliris, G. Hjalmtysson, H. V. Jagadish, M. A. Jones, E. Panagos, M. Rabinovich, and D. Srivastava, *Messaging System with Application-Defined States*, US Patent 06442546 issued 08/27/2002.

7. A. Biliris, G. Hjalmtysson, H. V. Jagadish, M. A. Jones, D. Lee, I. S. Mumick, E. Panagos, D. Srivastava, and D. Vista, *Declarative message addressing*, US Patent 06438608 issued 08/20/2002.

8. H. V. Jagadish, Raymond Ng, D. Srivastava, *Method and apparatus for substring selectivity estimation*, US Patent 06401088 issued 06/04/2002.

9. N. Anerousis, A. Biliris, H. V. Jagadish, *Automatic Aggregation of Network Management Information in Spatial Temporal and Functional Forms*, US Patent 06393472 issued 05/21/2002.

10. H. V. Jagadish, I. S. Mumick, M. Rabinovich, *Method and apparatus for asynchronous version advancement in a three version database*, US Patent 06351753 issued 02/26/2002.

11. M. Foladare, S. Goldman, and H. V. Jagadish, *Method and apparatus for sending an electronic mail message to a receiving party*, US Patent 06311210 issued 10/30/2001.

12. G. Banga, F. Douglis, H. V. Jagadish, and M. Rabinovich, *Method for reducing perceived delay between a time data is requested and a time data is available for display*, US Patent 06240447 issued 05/29/2001 (continuation of US Patent 5931904).

13. A. Biliris, G. Hjalmtysson, H. V. Jagadish, M. A. Jones, D. Lee, I. S. Mumick, E. Panagos, D. Srivastava, and D. Vista, *Declarative message addressing*, US Patent 06212552 issued 04/03/2001. Continuation separately patented as number 06438608.

14. H. V. Jagadish and I. S. Mumick, *Customer group billing*, US Patent 06173046 issued 01/09/2001.

15. M. Aravumudan, A. DeSimone, and H. V. Jagadish, *Distributed caching scheme for database systems*, US Patent 06154749 issued 11/28/2000.

16. H. V. Jagadish and I. S. Mumick, *Customer profile based customized messaging*, US Patent 06125173 issued 09/26/2000.

17. H. V. Jagadish and I. S. Mumick, *Method and system for continuing billing arrangements*, US Patent 06105863 issued 08/22/2000.

18. H. V. Jagadish and I. S. Mumick, *Telephone billing with summary information*, US Patent 06058170 issued 05/02/2000.

# DOCKET ALARM

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

### E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.