Professor Amit P. Sheth

Amit Sheth is an educator, researcher, and entrepreneur. He is the LexisNexis Ohio Eminent Scholar, an **AAAI Fellow**, an **IEEE Fellow**, and the executive director of Kno.e.sis—the Ohio Center of Excellence in Knowledge-enabled Computing. Kno.e.sis is also a multidisciplinary Ohio Center of Excellence in BioHealth Innovation. Its faculty and researchers are computer scientists, cognitive scientists, biomedical researchers, and clinicians. It is one of the largest US academic research groups in AI and Big (Semantic/Social/Sensor) Data, at the intersection of knowledge/semantics, NLP and machine learning. In recent years, Kno.e.sis' research impact has been responsible for Wright State University placing 2nd in World Wide Web (WWW) research among all world-class universities for its 5-year impact (http://j.mp/www-Mar13) and earning a spot among the top 10 organizations in the world based on its 10-year impact (http://j.mp/www-org-Jun15).

Prof. Sheth is working towards a vision of Computing for Human Experience and Augmented Personalized Health, enabled by the capabilities at the intersection of AI (semantic, cognitive, and perceptual computing) and Smart Data (exploiting multimodal physical-cyber-social big data). His recent work has involved Web 3.0 technologies and involves enterprise, social, sensor/"Internet of Thins" (IoT) data and applications. In the past, he has worked extensively on federated databases, semantic interoperability, service computing, and workflow management. Since founding Kno.e.sis, he has predominately been involved in cross-disciplinary research with key collaboration and applications in the areas of healthcare and life sciences (including connected health/dHeath/mHealth, biomedicine, and public health), human/social/economic development, smart cities, national defense/intelligence, and connected manufacturing. He is also intimately involved in open source activities, social entrepreneurship, technology transfer and licensing, commercialization, and regional economic development as he continues to lead research that emphasizes real-world scientific, technological, human development and economic impact.

As an educator: Prof. Sheth's most prized achievement is the **exceptional success of his past advisees**, all of whom compete successfully against graduates/postdocs from top 20 institutions. Several of his students have received prestigious international awards and fellowships and been mentioned in numerous articles in top global media outlets (http://knoesis.org/amit/media). Two of them have given keynotes at significant events prior to completing their PhDs, and a near majority of his 26 Ph.D. advisees have over 1,000 citations each, including three with 5,000+ citations each. The average citation for his first 20 Ph.D. advisees on Google Scholar exceeds 1,800 (http://j.mp/Kimpact). His students/postdocs are employed at major research universities (NCSU, CWRU, GMU, UKY, Stanford), top industry research labs (IBM's Research Labs and Watson, Samsung Research, Bosch Research, Target Labs, etc.), top technology companies (Facebook, LinkedIn, Amazon, Apple, CISCO, etc.), hold

executive positions, and are successful entrepreneurs. Their high demand is demonstrated by first year compensation in the $200-$250K range for a Ph.D. advisee and $120K for several of his M.S. advisees.

Prof. Sheth has demonstrated academic initiatives and innovations in the form of initiating/advising new academic programs (most recently on Big and Smart Data Sciences), being among the first in the world in offering courses on emerging topics (Internet Programming in 2000, Enterprise Information Systems & Distributed Workflow in 1995, Global/Web Information Systems in 1995, Semantic Web in 2001, Web 3.0 in 2013, etc.), online teaching, international educational and research collaborations, and extensive tutorial presentations to academic and professional audiences. He takes prides in nurturing **diversity**. Compared to a female student population of around 14% in good CS graduate programs, roughly half of his group consists of females, matched by excellent participation of underrepresented groups.

As a researcher: His **h-index of 97** (i-100 = 97) and 39,000+ citations to his publications (based on Google Scholar) place him **among the top 100 computer science and electronics authors** in Oct. 2017 (http://www.guide2research.com/scientists/ , 37th based on 10-yr. impact in mid-2016), top few in WWW (based on 5, 10, or all-years), top 25 in databases (all years) (based on the top authors list from Microsoft Academic Search, checked on Mar. 2013: http://j.mp/MAS-a), and at the top in semantic Web/computing/technology and a few other topics (cf: Aminer: http://knoesis.wright.edu/amit/publications/). He has been a PI of numerous competitive **research grants**, totaling **over $27 million,** sponsored by federal agencies (**25+ NSF, 9 NIH including 4 R01s**, DARPA, AFRL, AFOSR, ARL, ONR, etc.) as well as industry (Microsoft Research, IBM Research, HP labs, etc.). Additionally, **more than $6 million** has been awarded to support his technology commercialization and R&D efforts, resulting in several times more in economic activities including payroll associated with the jobs created. Since 2010, his own annual research expenditures have averaged $1-2 million (directly **supporting approximately 25** students and post-docs, including 13-18 Ph.D. students throughout the last decade). **During the 10 years starting with his move to Wright State University, his research grants funded 1,036 months of GRA, which translates to ~300 quarter/semesters of GRA support.** He is on several journal editorial boards (including *IEEE Internet Computing*), was the founding EIC of the *International Journal on Semantic Web and Information Systems (IJSWIS)* with IF>3 during much of the time he was the EIC, served as an EIC of *Distributed and Parallel Databases (DAPD)* for 15 years, and is a co-editor of two Springer book series. He has organized and/or co-organized over 100 international events (conferences/workshops), served on 230+ PCs, and given **55+ keynotes** at many of the most significant conferences in his area.

As an Entrepreneur, Technologist, Executive and Leader with Real-World Impact: Prof. Sheth's research has led to the founding of five companies resulting in significant regional impact and development of high-tech jobs. **Three** of the companies (one acquired, one sustaining, and one recently formed) are **based on the licensing of technologies that resulted from his university research,** resulting in significant licensing based fees/revenue. The other two involved incubating the technology under his guidance. His work has also resulted in several commercial products, and many deployed applications. He has a long history of leading multidisciplinary, multi-institutional, and multinational activities. In the areas of healthcare and life sciences, his intensive collaborations with clinicians as well as biomedical researchers have resulted in a large number of research and commercial tools, systems, and applications.

As a leader, he has been able to demonstrate the ability to create world-class entities to achieve unprecedented institutional outcomes. Kno.e.sis, with its ability to position Wright State University among the top 10 in the world in the area of World Wide Web, and similar previous success for the LSDIS lab and the University of Georgia are key exemplars. His leadership approach includes an ability to create a strong ecosystem with a focus on vision, people, collaborations, and resources. He has pursued a vision with a multidisciplinary scope, placing bets on high risk and high reward topics well before those topics have ascended the hype curve, developed a highly collaborative environment that attracts exceptional members (e.g., employees, faculty, students), personally and collectively securing highly competitive funds, and ensuring exceptional outcomes (e.g., student success, significantly enhanced productivity of collaborating faculty, IP creation and licensing, technology transfer, and regional economic development). Example innovations and the terms he coined include Smart Data (2004), Citizen Sensing (2008), Semantic Perception (2008), and Continuous Semantics (2009).

LexisNexis Ohio Eminent Scholar has been the first and the primary occupant of the 50K sqft Joshi Research Center. Kno.e.sis occupies more than a floor of the building.

For the three companies he has founded based on licensing technology resulting from his academic research (including those sponsored by NSF research, I-Corp, PFI-AIR-TT), **he has also played executive roles encompassing Chairman of the Board, President and CEO, Senior VP, CTO, and Chief Scientist, founder, supervising a full range of activities including fundraising, finance, customer acquisition/sales, business development and marketing, engineering, recruiting and training**. His second (VC-funded) company grew to approximately 35 employees (with a majority recruited from the university) and spent $7 million in local payroll before it was acquired. He has served (and continues to serve) on technology and business advisory broads and in a variety of advising roles, including international research projects, academic programs, and startups. He has had a long-term interest in higher education and has given a number of presentations covering policy and strategic issues to decision-makers.

More at http://knoesis.org/amit , http://www.linkedin.com/in/amitsheth