UCI Department of Computer Science DISTINGUISHED LECTURE SERIES



JEANNETTE WING

Avanessians Director of the Data Science Institute Professor of Computer Science Columbia University

"Data for Good"

Friday, April 13, 2018 • 11 a.m. Donald Bren Hall, Room 6011

No cost to attend • Open to the public • Seating is on a first-come, first-served basis

ABSTRACT

Every field has data. We use data to discover new knowledge, to interpret the world, to make decisions, and even to predict the future. The recent convergence of big data, cloud computing, and novel machine learning algorithms and statistical methods is causing an explosive interest in data science and its applicability to all fields. This convergence has already enabled the automation of some tasks that better human performance. The novel capabilities we derive from data science will drive our cars, treat disease, and keep us safe. At the same time, such capabilities risk leading to biased, inappropriate, or unintended action. The design of data science solutions requires both excellence in the fundamentals of the field and expertise to develop applications which meet human challenges without creating even greater risk.

The Data Science Institute at Columbia University promotes "Data for Good": using data to address societal challenges and bringing humanistic perspectives as—not after—new science and technology is invented. Started in 2012, the Institute is now a university-level institute representing over 250 affiliated faculty from 12 different schools across campus. Data science literally touches every corner of the university. In this talk, I will present the mission of the Institute, highlights of our educational and research activities, and plans for future initiatives.

BIO

Jeannette M. Wing is Avanessians Director of the Data Science Institute and Professor of Computer Science at Columbia University. From 2013 to 2017, she was a Corporate Vice President of Microsoft Research. She is Consulting Professor of Computer Science at Carnegie Mellon where she twice served as the Head of the Computer Science Department and had been on the faculty since 1985. From 2007-2010 she was the Assistant Director of the Computer and Information Science and Engineering Directorate at the National Science Foundation. She received her S.B., S.M., and Ph.D. degrees in Computer Science, all from the Massachusetts Institute of Technology.

Professor Wing's general research interests are in the areas of trustworthy computing, specification and verification, concurrent and distributed systems, programming languages, and software engineering. Her current interests are in the foundations of security and privacy. She was or is on the editorial board of twelve journals, including the Journal of the ACM and Communications of the ACM.

She is currently Retiring Chair of the AAAS Section on Information, Computing and Communications, and a member of: the Science, Engineering, and Technology Advisory Committee for the American Academy for Arts and Sciences; the Board of Trustees for the Institute of Pure and Applied Mathematics; the Advisory Board for the Association for Women in Mathematics; and the Alibaba Technical Advisory Board. She has been a member of many other academic, government, and industry advisory boards. She received the CRA Distinguished Service Award in 2011 and the ACM Distinguished Service Award in 2014. She is a Fellow of the American Academy of Arts and Sciences, American Association for the Advancement of Science, the Association for Computing Machinery (ACM), and the Institute of Electrical and Electronic Engineers (IEEE).