BIOGRAPHY

Sunil Vadera is a Professor of Computer Science at the University of Salford. He is a Fellow of the British Computer Society, a Chartered Engineer (C.Eng) and Chartered IT Professional (CITP). Sunil was awarded the BDO Best UK British Indian Scientist and Engineer Prize in 2014 and the Amity University Research Award for AI & Neural Networks in 2018. He has held many leadership roles including as Dean of the School, Head of Computer Science, Associate Dean of Research, and Director of Informatics Research Institute. He was Chair and Vice Chair of British Computer Society (BCS) Accreditations Committee from 2007 to 2010.

Sunil gained a first class BSc(Hons) in Computer Science and Mathematics from the University of Salford in 1982, receiving three best student prizes. He holds a PhD from the University of Manchester in the area of Formal Methods of Software Development which was awarded in 1992. Following graduation, he began his career as a Research Assistant and progressed to a Lectureship in Computer Science in 1984. He was promoted to a Senior Lecturer in 1997 and to a Chair in Computer Science in 2000.

His research is driven by the desire to close the gap between theory and practice in data mining and AI, something he has been doing for over two decades by working with industry. Examples of his work includes:

- Developing new models for real time sensor validation of gas turbines in collaboration with the Mexican Instituto de Electricas
- Data mining of near miss explosions data for project funded by and in collaboration with the Health and Safety Executive
- Analysis of SMART meters data of over 40,000 households for British Gas that aimed to gain insight into consumer behaviour
- An FP7 funded project on Self-Learning Energy Efficient Buildings and Open Spaces
- Analysing factors affecting children in need and troubled families
- Credit risk assessment for sub-prime lending aimed at improving financial inclusion

Sunil was Programme Chair of the 5th BCS Symposium on Knowledge Discovery and Data Mining in 2009, Chair of the IFIP Conference on Intelligent Information Processing held in Salford in 2010 and organised a Workshop on Cost-Sensitive Data Mining as part of the IEEE International Data Mining Conference held in Brussels in 2013. More recently, he is Chair of the International Conference on Information Management and Engineering (2015, 2016, 2017, 2018, 2019).

His main line of research in recent years has been in the field of cost-sensitive learning, where he has developed novel algorithms and in deep learning, where he is studying methods of reducing the size of the neural networks. His research has been published in some of the leading outlets in the field, including the Computer Journal, ACM Transactions on Knowledge Discovery from Data, ACM Computing Surveys, Journal of the Operational Research Society, Expert Systems Journal, Foundations of Science, and IEEE Transactions of Power Systems.