Dr. Jaime Carbonell is the Director of the Language Technologies Institute and Allen Newell Professor of Computer Science at Carnegie Mellon University. He received SB degrees in Physics and Mathematics from MIT, and MS and PhD degrees in Computer Science from Yale University. His current research includes machine learning, artificial intelligence, deep neural networks, scalable data mining, natural language processing, and applications to finance, cybersecurity and computational proteomics. He invented proactive machine learning, including its underlying decision-theoretic framework, and has recently worked on new methods for transfer learning. He is also known for the maximal marginal relevance (MMR) principle in information retrieval, for derivational analogy in problem solving, for example-based machine translation and for machine learning in structural biology, and in protein interaction networks. Overall, he has published some 380 papers and books, and has supervised or is supervising some 74 PhD dissertations. He has received several awards for teaching and research, including the Okawa prize in 2015. Dr. Carbonell has served on multiple governmental advisory committees such as the Human Genome Committee of the National Institutes of Health, the Oakridge National Laboratories Scientific Advisory Board, the National Institute of Standards and Technology Interactive Systems Scientific Advisory Board, and the German National Artificial Intelligence (DFKI) Scientific Advisory Board. He has also co-founded three AI-based companies and serves on the board of Carnegie Speech.