

KM Conference 2025 25 - 28 June 2025

Department of Information Engineering and Mathematics, University of Siena, Italy Themes: Knowledge Management, Cybersecurity, Learning, and Information Technology https://iiakm.org/conference/

Keynote Lecture

Augmented Intelligence: Designing Human-Al Dialogue for Knowledge Management

Professor Antonio Rizzo

Professor Cognitive Science and Technology Università di Siena

Keynote Overview:

Artificial Intelligence (AI) and Machine Learning (ML) have become central to modern knowledge management systems. Al is being used to automate routine tasks such as content tagging, document sorting, and updating outdated information. This integration not only saves time but also ensures consistency and reduces human error. But there is more, following the visionary path of Vannevar Bush, Joseph Licklider, Doug Engelbart, we can design solutions for Augmented Intelligence. Yet, this requires a careful design of the interaction between Humans and AI Agents. At the core of this interaction, there is a dialogical approach. This presentation illustrates the foundation of the theory of dialogical thinking and how the theory can be applied to design solutions of Augmented Intelligence through the dialogue between humans and Large Language Models in Medicine and Manufacturing Industry.

About the Keynote Presenter:

Antonio Rizzo is a Full Professor at the Università di Siena, specializing in cognitive science, human-computer interaction, and artificial neural nets. His research focuses on human-centered design, cognitive ergonomics, and Al applications in industry and healthcare. He has served as the Chair of the European Association of Cognitive Ergonomics; as a member of the Scientific Committee Incitatif de Recherche sur l'Éducation et la Formation (PIREF) of the French Government; as a member of the WG30 NATO Human Factors and Human Reliability Group; and as Apple Inc. Liaison for the dissemination of the User-Centered Design process within the Apple Design Project, 1995-1997. Beyond academia, he has worked as a consultant for companies such as Philips Design, Siemens, FRANKE, Trenitalia, and MPS, applying cognitive science



principles to technology development. He co-founded UDOO, a single board computer bridging microcontroller with microprocessor.