SAP Hana Platform Big Data Management: Architecture, Design, and Journey Into The Cloud

SAP's HANA data management platform was architected from the ground up to leverage modern hardware technologies including large main memories, multi-core parallelism, SIMD architectures and vector processing, and to exploit software-hardware co-innovation. SAP HANA supports novel and existing applications with dramatically faster queries, access to up-to-date business data, and greatly simplified database administration.

In this talk, we'll describe some key aspects of the internal design of the HANA system, explaining how HANA achieves orders of magnitude performance improvements. We will then describe the evolution of SAP HANA into a holistically integrated Big Data platform designed to solve enterprise data problems end to end for massively distributed database management.

Finally, we'll reflect upon some future directions for SAP HANA to stay abreast of imminent advancements in storage class memories and system architectures, and for deployment in the cloud landscape.